

=> d his

(FILE 'HCAPLUS' ENTERED AT 08:56:42. ON 17 JUL 2003)  
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 08:57:19 ON 17 JUL 2003  
ACT DESAI/A

L1 STR  
L2 34103 SEA FILE=REGISTRY SSS FUL L1

-----  
ACT DESAI2/A  
-----

L3 STR  
L4 28 SEA FILE=REGISTRY SSS FUL L3  
-----

FILE 'HCAPLUS' ENTERED AT 08:57:59 ON 17 JUL 2003

L5 16634 S L2  
L6 7 S L4  
L7 1272711 S POLYMER?  
L8 847 S L5 AND L7  
L9 92482 S CONJUGAT?  
L10 149 S L8 AND L9  
L11 86623 S DRUG DELIVER?  
L12 48 S L10 AND L11  
L13 8 S L12 AND PRODRUG  
L14 1457 S PAYLOAD? OR PAYLOAD?/AB  
L15 1 S L12 AND L14  
L16 30361 S (CONTROL? OR SLOW OR TIME? OR SUSTAIN?) (L) (RELEAS?)  
L17 6 S L12 AND L16  
L18 12 S L17 OR L15 OR L13  
SELECT RN L18 HIT 1-12

Clock

L6 - #4 of 7 "?"

L18 #7 of 12 102(b)

All of 12 102(a)

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:02:40 ON 17 JUL 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 16 JUL 2003 HIGHEST RN 549206-78-2

DICTIONARY FILE UPDATES: 16 JUL 2003 HIGHEST RN 549206-78-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

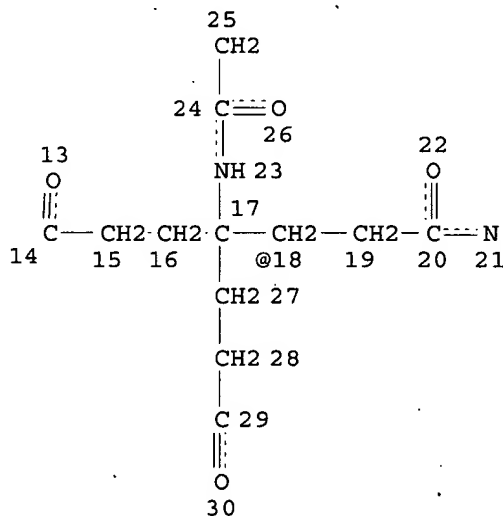
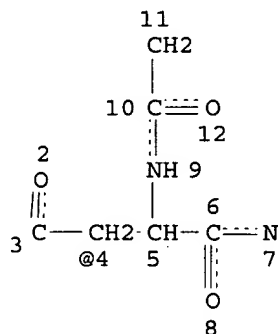
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d que stat 12

L1 STR

G1 1



VAR G1=4/18

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

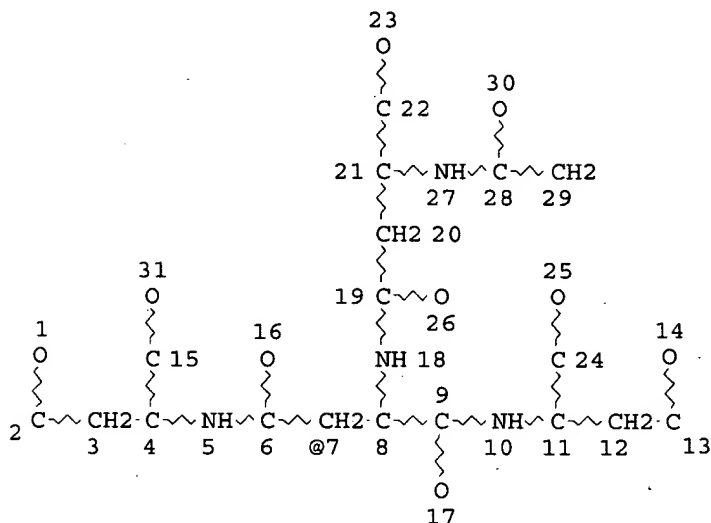
L2 34103 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 350420 ITERATIONS  
SEARCH TIME: 00.00.08

34103 ANSWERS

=> d que stat 14  
L3 STR

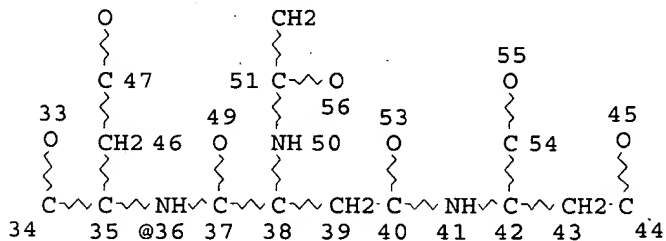
→ page 45 and larger structure  
on page 46



48

52

Page 1-A



Page 2-A

VAR G1=36/7

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 56

STEREO ATTRIBUTES: NONE

L4 28 SEA FILE=REGISTRY SSS FUL L3

Page 3

100.0% PROCESSED 160407 ITERATIONS  
SEARCH TIME: 00.00.07

28 ANSWERS

=> fil hcaplus  
FILE 'HCAPLUS' ENTERED AT 09:02:50 ON 17 JUL 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 17 Jul 2003 VOL 139 ISS 3  
FILE LAST UPDATED: 16 Jul 2003 (20030716/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d que nos l6  
L3 STR  
L4 28 SEA FILE=REGISTRY SSS FUL L3  
L6 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L4

=> d que nos l18  
L1 STR  
L2 34103 SEA FILE=REGISTRY SSS FUL L1  
L5 16634 SEA FILE=HCAPLUS ABB=ON PLU=ON L2  
L7 1272711 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYMER?/OBI  
L8 847 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 AND L7  
L9 92482 SEA FILE=HCAPLUS ABB=ON PLU=ON CONJUGAT?/OBI  
L10 149 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND L9  
L11 86623 SEA FILE=HCAPLUS ABB=ON PLU=ON DRUG DELIVER?/OBI  
L12 48 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND L11  
L13 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND PRODRUG/OBI  
L14 1457 SEA FILE=HCAPLUS ABB=ON PLU=ON PAYLOAD?/OBI OR PAYLOAD?/AB  
L15 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND L14  
L16 30361 SEA FILE=HCAPLUS ABB=ON PLU=ON (CONTROL?/OBI OR SLOW/OBI OR  
TIME?/OBI OR SUSTAIN?/OBI) (L) (RELEAS?/OBI)  
L17 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND L16  
L18 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 OR L15 OR L13

=> d .ca hitstr l6 1-7;d .ca hitstr l18 1-12

L6 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2003:376579 HCAPLUS

DOCUMENT NUMBER: 138:390913  
 TITLE: Polymeric thiol-linked prodrugs  
 INVENTOR(S): Choe, Yun Hwang; Greenwald, Richard B.  
 PATENT ASSIGNEE(S): Enzon, Inc., USA  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003039479	A2	20030515	WO 2002-US35868	20021108
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2001-344914P P 20011109  
 US 2002-367320P P 20020325

OTHER SOURCE(S): MARPAT 138:390913

AB Thiol-linked polymeric prodrugs and methods of making and using the same are disclosed. The use of a sulfhydryl bond as the basic link for linking the polymer to the drug allows a prodrug to be formed which takes advantage of plasma enzymes in vivo. A preferred conjugate is a PEG-6-MP conjugate (prepn. given), showing roughly 25-35% redn. in tumor growth as compared to 6-MP.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 35

IT 452369-71-0P 524961-31-7P 524961-33-9P 524961-36-2P 524961-39-5P  
 524961-41-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polymeric thiol-linked prodrugs)

IT 608-09-3P 150109-41-4P 150109-43-6P 152293-46-4P 153354-68-8P

167082-77-1P 188636-64-8P 396134-22-8P 452369-72-1P

474083-07-3P 474083-09-5P 524961-30-6P 524961-32-8P

524961-35-1P 524961-37-3P 524961-38-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of polymeric thiol-linked prodrugs)

IT 524961-40-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polymeric thiol-linked prodrugs)

IT 524961-41-9P

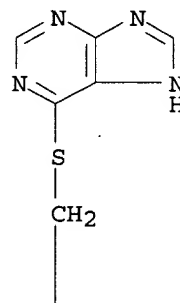
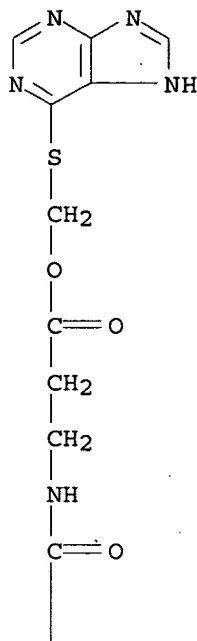
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polymeric thiol-linked prodrugs)

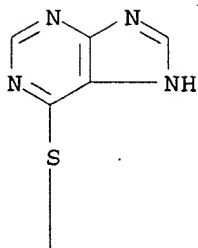
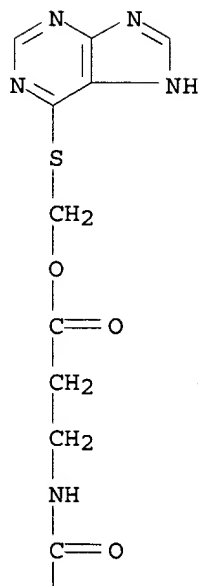
RN 524961-41-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with hydroxyacetyl-L-aspartoylbis[L-aspartoylbis[L-aspartoylbis[.beta.-alanine]]] octakis[(1H-purin-6-ylthio)methyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

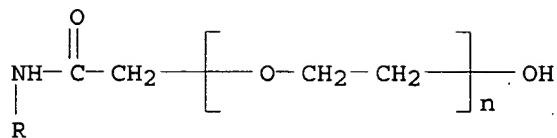
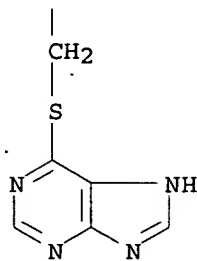


PAGE 1-B

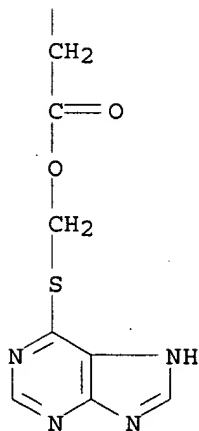




PAGE 3-A



PAGE 3-B



IT 474083-07-3P 474083-09-5P

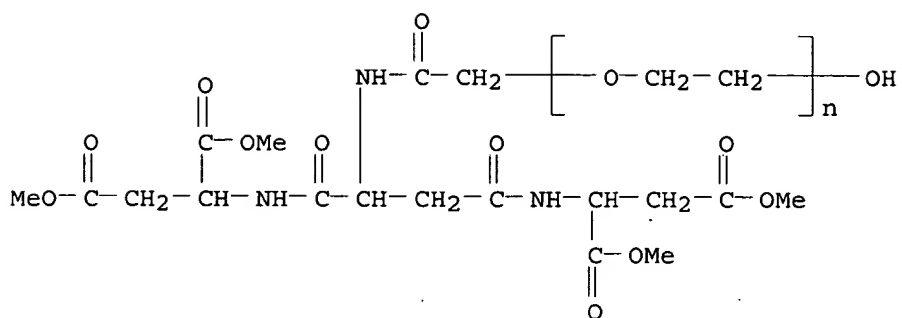
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of polymeric thiol-linked prodrugs)

RN 474083-07-3 HCAPLUS

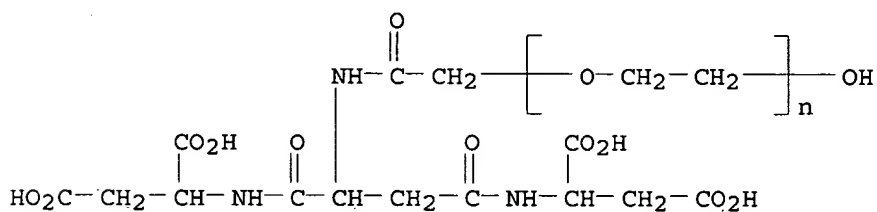
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] tetramethyl ester (9CI) (CA INDEX NAME)





RN 474083-09-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] (9CI) (CA INDEX NAME)



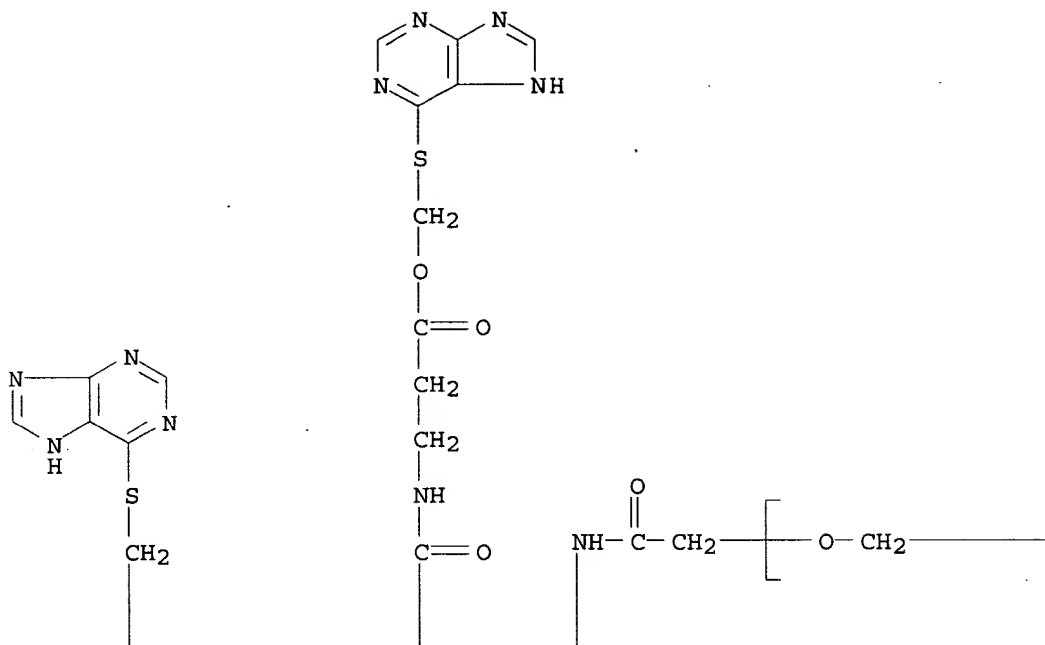
IT 524961-40-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of polymeric thiol-linked prodrugs)

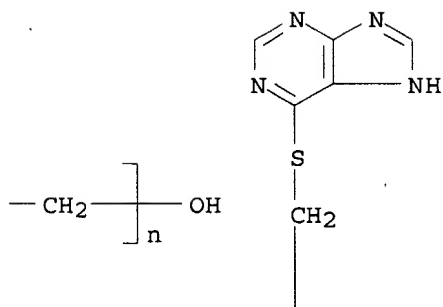
RN 524961-40-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with hydroxyacetyl-L-aspartoylbis[L-aspartoylbis[.beta.-alanine]] tetrakis[(1H-purin-6-ylthio)methyl] ester (9CI) (CA INDEX NAME)

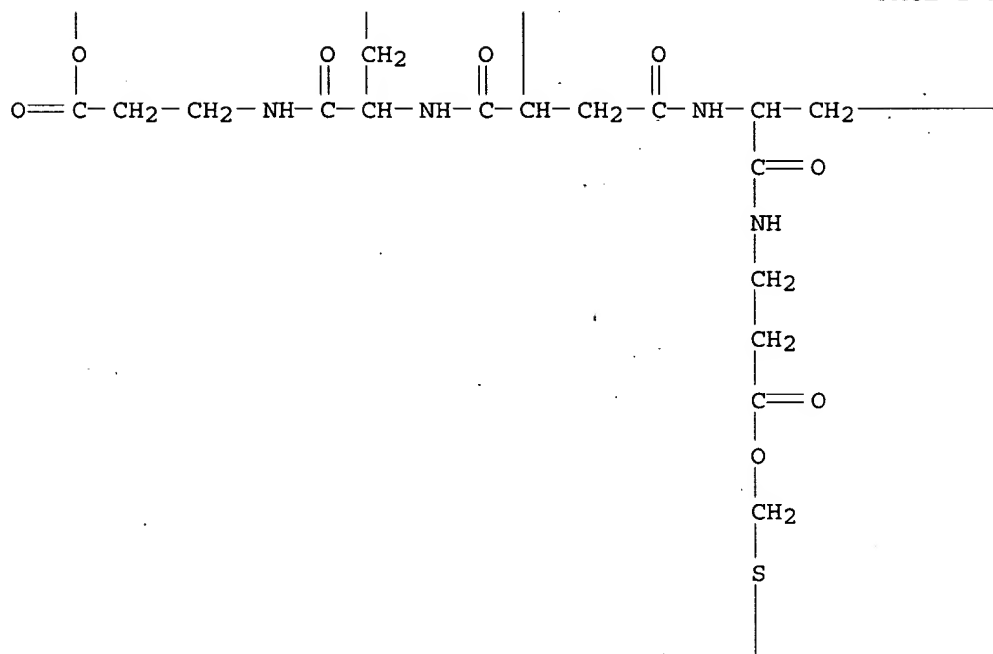
PAGE 1-A



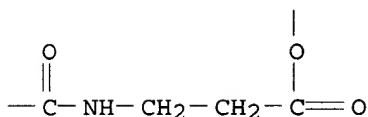
PAGE 1-B



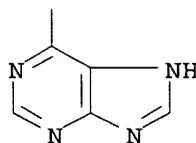
PAGE 2-A



PAGE 2-B



PAGE 3-A



L6 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:130614 HCAPLUS

DOCUMENT NUMBER: 137:341957

TITLE: Anticancer drug delivery systems: multi-loaded N4-acyl poly(ethylene glycol) prodrugs of ara-C. II. Efficacy in ascites and solid tumors

AUTHOR(S): Choe, Yun H.; Conover, Charles D.; Wu, Dechun; Royzen, Maksim; Gervacio, Yoany; Borowski, Virna; Mehlig, Mary; Greenwald, Richard B.

CORPORATE SOURCE: Enzon, Inc., Piscataway, NJ, 08854-3969, USA

SOURCE: Journal of Controlled Release (2002), 79(1-3), 55-70

CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The synthesis of branched PEG (40,000) acids has been achieved using aspartic acid (Asp) and AspAsp dendrons. Complete conjugation of these dendritic acids with cytosine arabinoside (ara-C) was achieved by the use of spacers that allowed a greater sepn. of the branches to accommodate several large ara-C mols. in proximity to each other. The tetrameric and octameric PEG-ara-C amide prodrugs were much more effective in the treatment of solid and ascites tumors compared to the native drug. The greater loading of the PEG backbone appears to have achieved a min. threshold concn. for the therapeutic delivery of ara-C.

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1, 33, 35

IT 452369-80-1P 452943-24-7P 452952-59-9P 474083-30-2P

474083-34-6P 474083-36-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and efficacy in ascites and solid tumors of multi-loaded N4-acyl polyethylene glycol prodrugs of ara-C)

IT 108466-89-3P 167082-77-1P 187978-51-4P 229958-24-1P 229958-26-3P  
229958-32-1P 379711-88-3P 379711-89-4P 396133-75-8P 396133-77-0P  
396134-31-9P 452347-80-7P 452347-83-0P 452369-70-9P 452369-73-2P  
452369-74-3P 452369-75-4P 452369-76-5P 452369-77-6P 452369-79-8P  
474083-03-9P 474083-05-1P 474083-07-3P 474083-09-5P  
474083-17-5P 474083-19-7P 474083-21-1P 474083-25-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and efficacy in ascites and solid tumors of multi-loaded N4-acyl polyethylene glycol prodrugs of ara-C)

IT 474083-34-6P 474083-36-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and efficacy in ascites and solid tumors of multi-loaded N4-acyl polyethylene glycol prodrugs of ara-C)

RN 474083-34-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-ether with hydroxyacetyl-L-aspartoylbis[N1,N4-bis[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-oxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

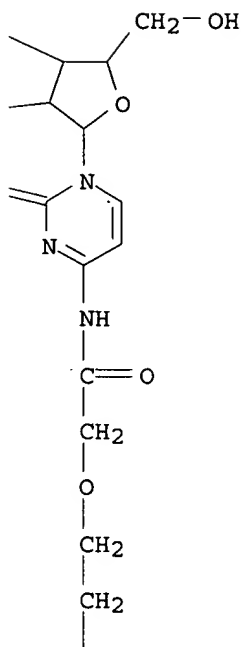
PAGE 1-A

HO—

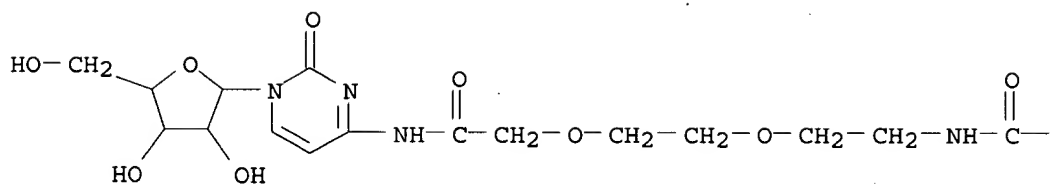
HO—

O=

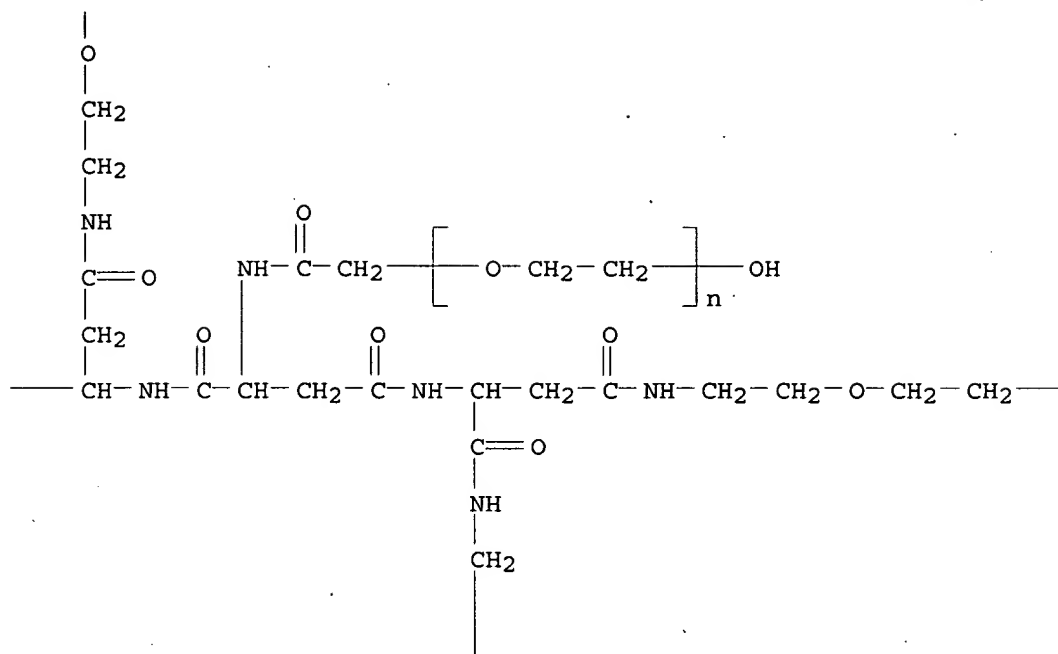
PAGE 1-B



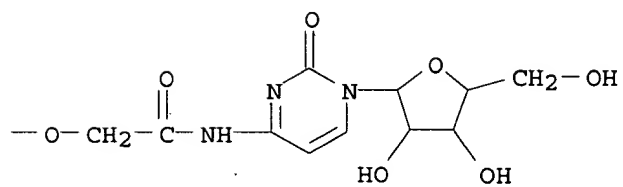
PAGE 2-A



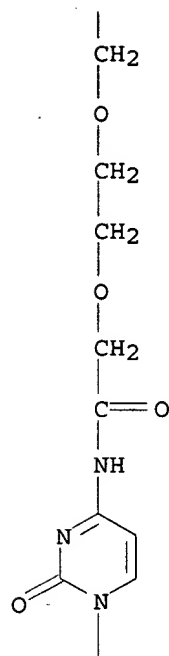
PAGE 2-B



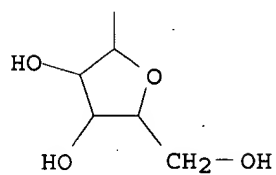
PAGE 2-C



PAGE 3-B

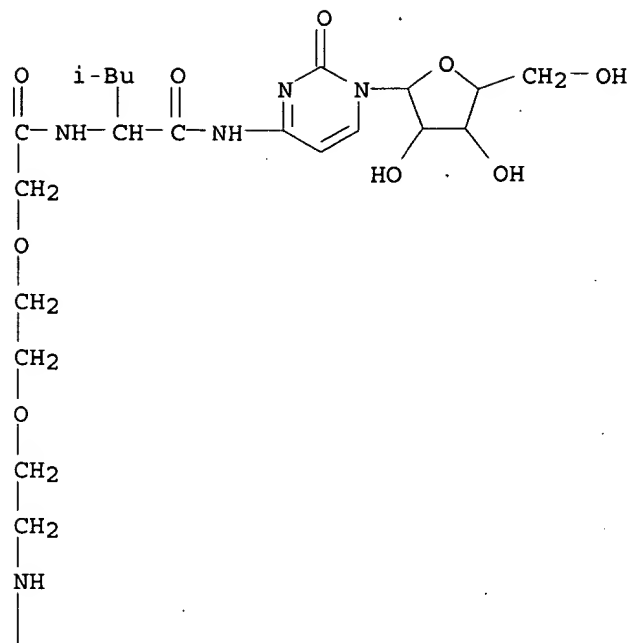


PAGE 4-B

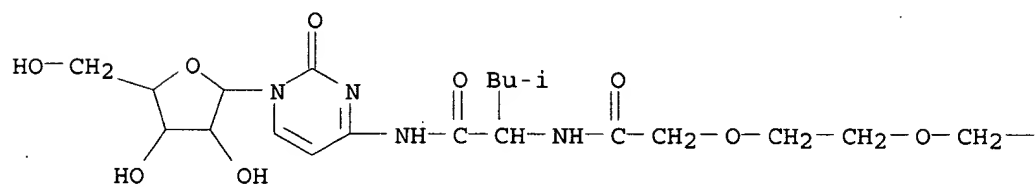


RN 474083-36-8 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-ether with  
 hydroxyacetyl-L-aspartoylbis [N1,N4-bis [2- [2- [2- [[(1S)-1- [[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]-3-  
 methylbutyl]amino]-2-oxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA  
 INDEX NAME)

PAGE 1-B

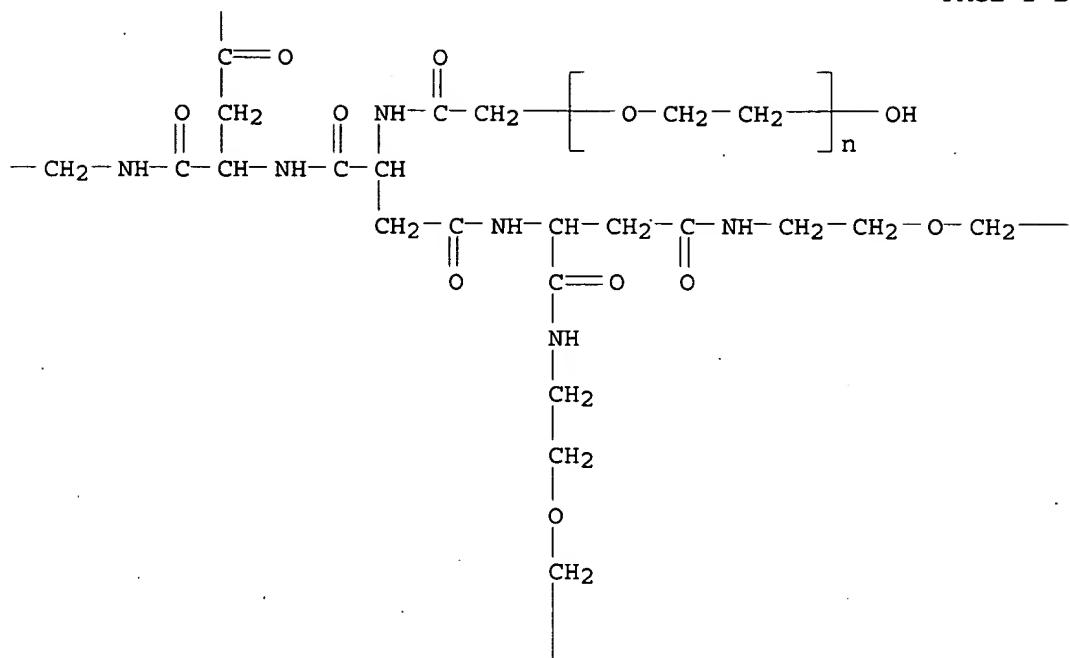


PAGE 2-A

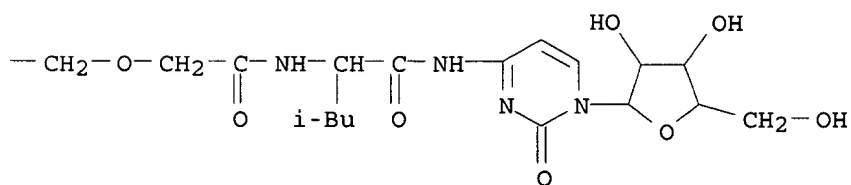




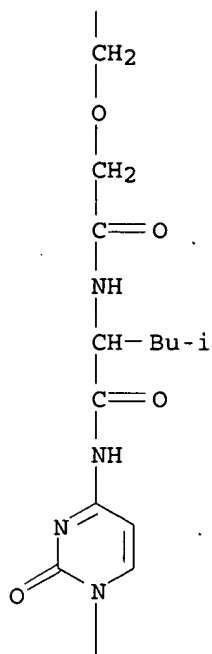
PAGE 2-B



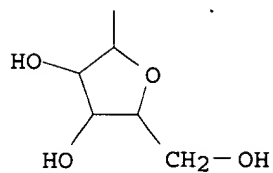
PAGE 2 - C



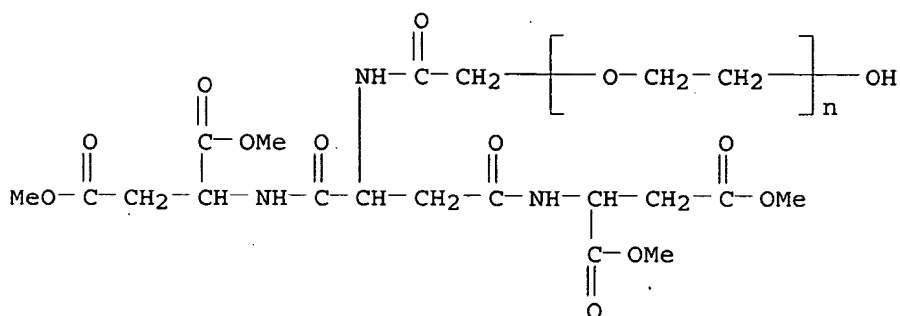
PAGE 3-B



PAGE 4-B

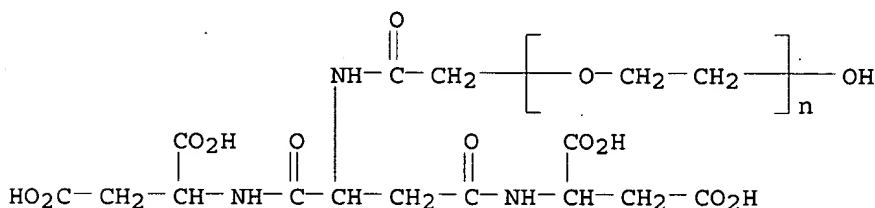


IT 474083-07-3P 474083-09-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and efficacy in ascites and solid tumors of multi-loaded  
 N4-acyl polyethylene glycol prodrugs of ara-C)  
 RN 474083-07-3 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with  
 N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] tetramethyl ester (9CI)  
 (CA INDEX NAME)



RN 474083-09-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:107826 HCAPLUS

DOCUMENT NUMBER: 136:172758

TITLE: Terminally-branched polymeric linkers containing extension moieties for prodrug conjugates

INVENTOR(S): Greenwald, Richard B.; Choe, Yun H.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 32 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002015691	A1	20020207	US 2001-823296	20010329
PRIORITY APPLN. INFO.:			US 2000-193931P	P 20000331

AB The present invention relates to polymer-based (e.g., PEG) conjugates having increased therapeutic payloads. In particular, the invention relates to the use of extension moieties which increase the efficiency of the loading of drugs onto the polymeric carriers. A variety of prodrugs were prepd. from ara-C and PEG derivs. by using spacer groups. The prodrug demonstrated better antitumor activity than ara-C alone. The prodrug produced complete tumor regression.

IC ICM A61K031-785

ICS C08G073-00

NCL 424078360

mine claims  
priority to  
60/193,931  
3/31/00  
same provisions  
Not  
This is the  
application  
I am  
reviewing

This is my  
application #  
currently.  
Not  
an  
issued  
patent.  
"?"

8/15/03  
This is my  
application!!

CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1, 37

IT 396133-96-3P 396133-97-4P 396133-98-5P 396133-99-6P 396134-00-2P  
 396134-01-3P 396134-02-4P 396134-06-8P 396134-07-9P 396134-08-0P  
 396134-09-1P 396134-10-4P 396134-11-5P 396134-12-6P  
 396134-15-9P 396134-16-0P 396134-17-1P  
 396134-18-2P 396134-19-3P 396134-20-6P  
 396134-21-7P 397244-13-2P 397244-15-4P 397244-37-0P  
 397244-38-1P 397244-39-2P 397244-40-5P 397245-64-6P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (terminally-branched polymeric linkers contg. extension moieties for  
 prodrug conjugates)

IT 80681-05-6P 96989-50-3P 108466-89-3P 139115-91-6P 167082-77-1P  
 188636-64-8P 259802-47-6P 261364-63-0P 341551-69-7P 379711-88-3P  
 379711-89-4P 396133-72-5P 396133-74-7P 396133-75-8P 396133-77-0P  
 396133-78-1P 396133-79-2P 396133-81-6P 396133-82-7P 396133-83-8P  
 396133-85-0P 396133-86-1P 396133-88-3P 396133-89-4P 396133-90-7P  
 396133-92-9P 396133-93-0P 396133-95-2P 396134-04-6P  
 396134-13-7P 396134-14-8P 396134-22-8P  
 396134-24-0P 396134-25-1P 396134-28-4P 396134-30-8P  
 396134-31-9P 397245-65-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (terminally-branched polymeric linkers contg. extension moieties for  
 prodrug conjugates)

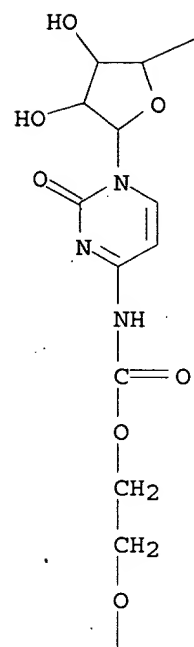
IT 367928-61-8P  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 (terminally-branched polymeric linkers contg. extension moieties for  
 prodrug conjugates)

IT 396134-15-9P 396134-16-0P 396134-17-1P  
 396134-18-2P 396134-19-3P 396134-20-6P  
 396134-21-7P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (terminally-branched polymeric linkers contg. extension moieties for  
 prodrug conjugates)

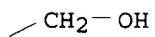
RN 396134-15-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[[[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]ethoxy  
 ]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

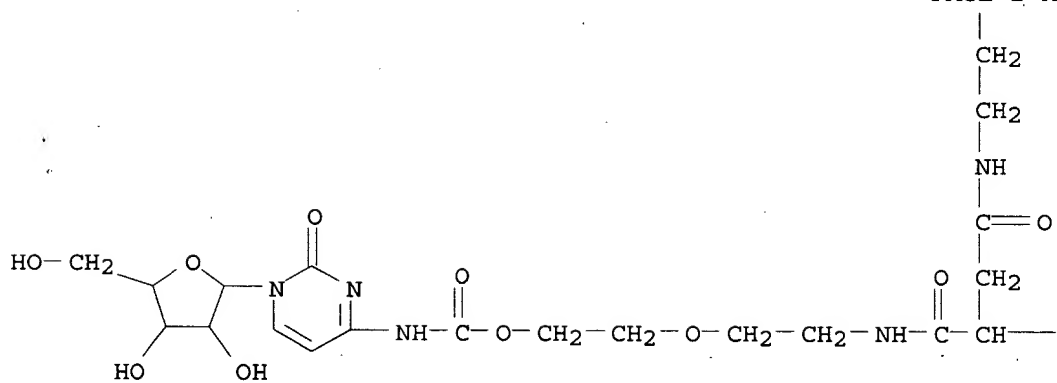
PAGE 1-A



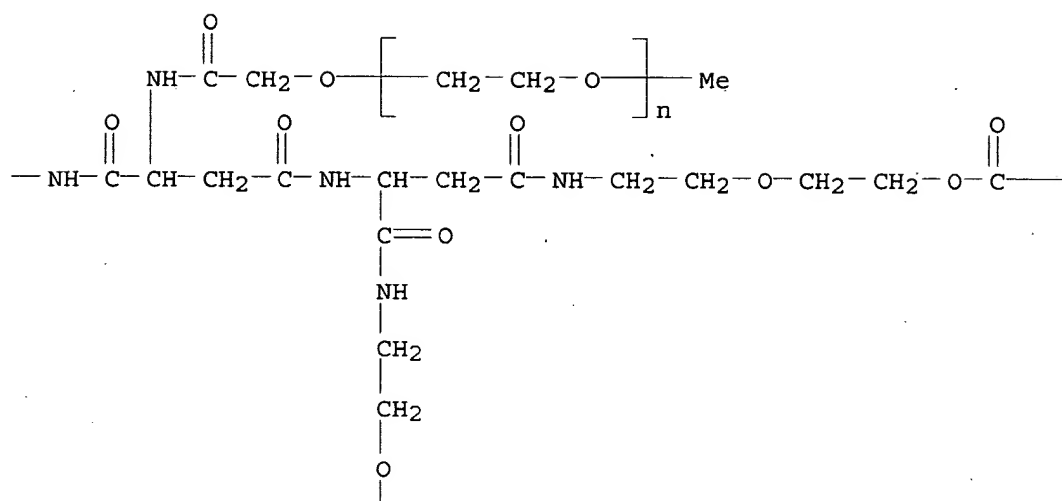
PAGE 1-B



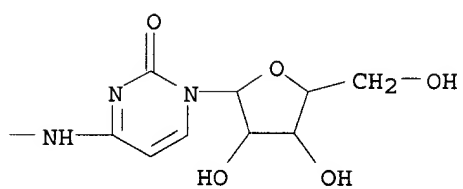
PAGE 2-A



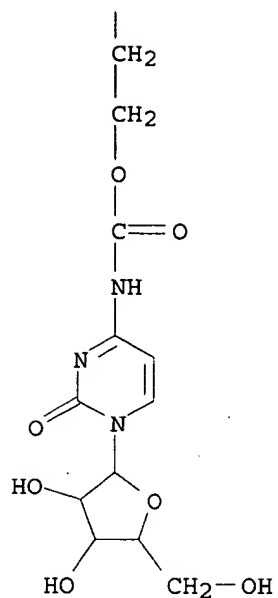
PAGE 2-B



PAGE 2-C



PAGE 3-B



RN 396134-16-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis [N1,N4-bis [2-[2-[2-[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-  
 oxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

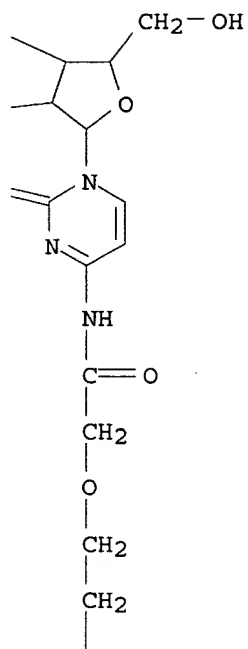
PAGE 1-A

HO—

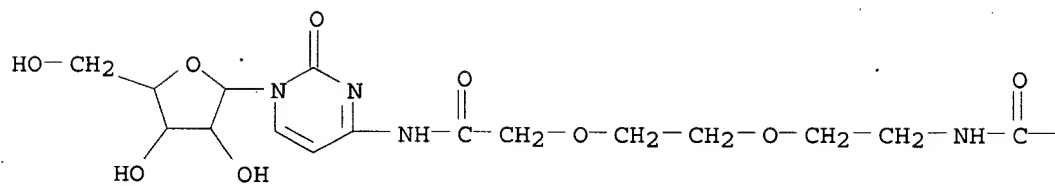
HO—

O=

PAGE 1-B

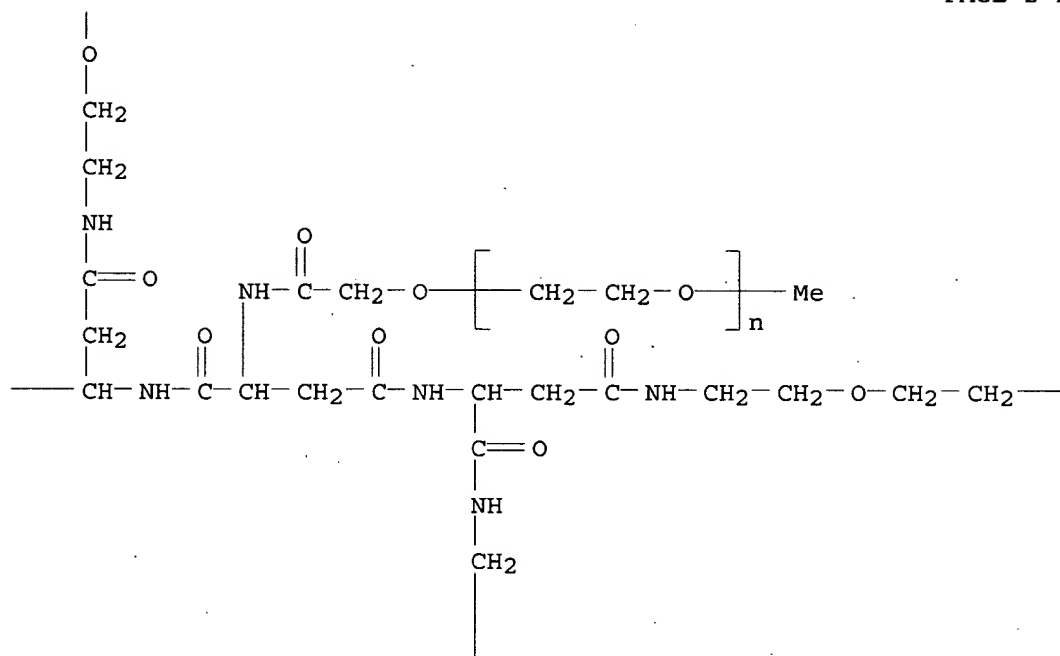


PAGE 2-A

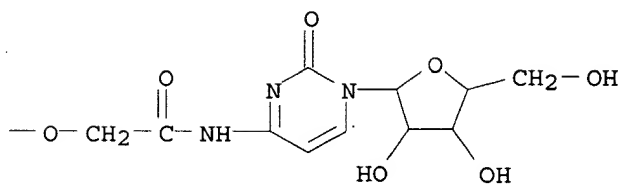




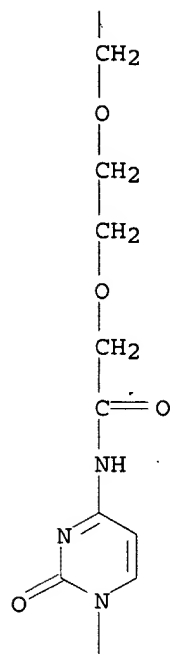
PAGE 2-B



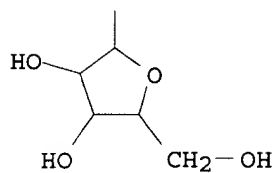
PAGE 2-C



PAGE 3-B



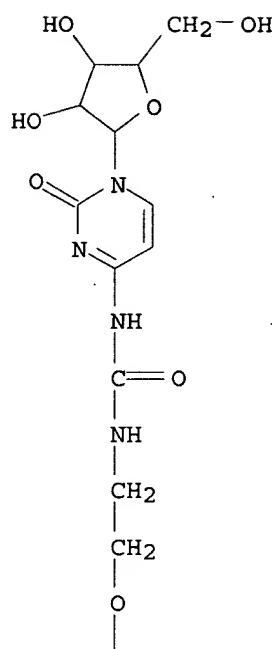
PAGE 4-B



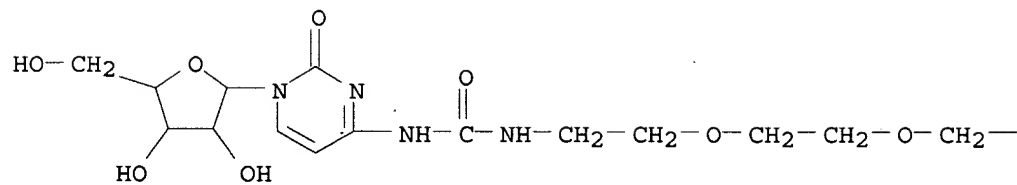
RN 396134-17-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[[[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl) amino] carbonyl] amino] etho  
 xyl]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

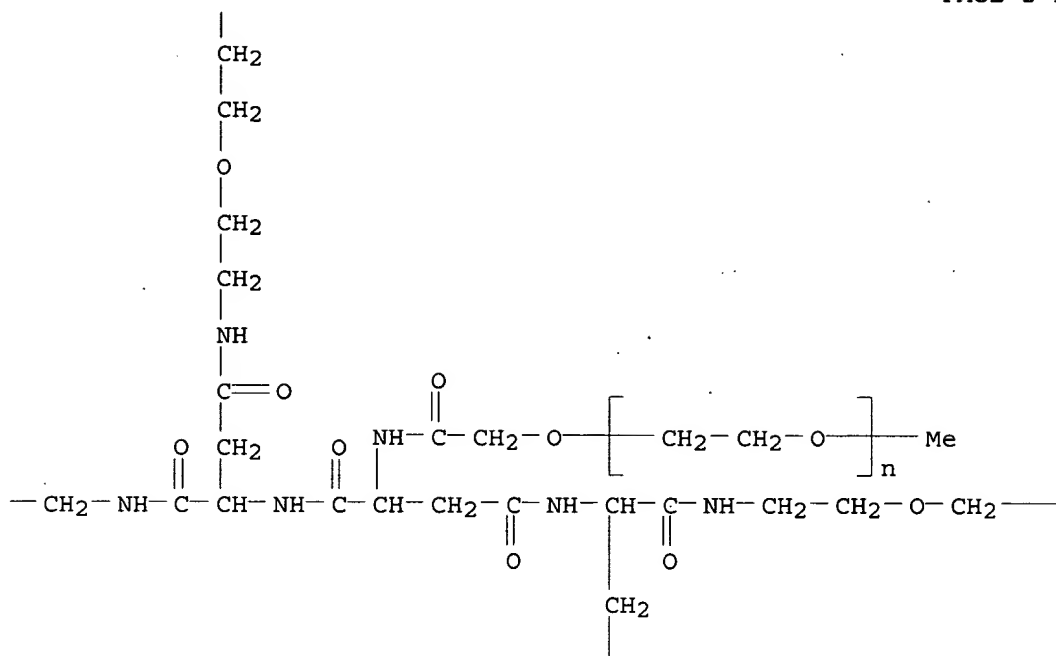
PAGE 1-B



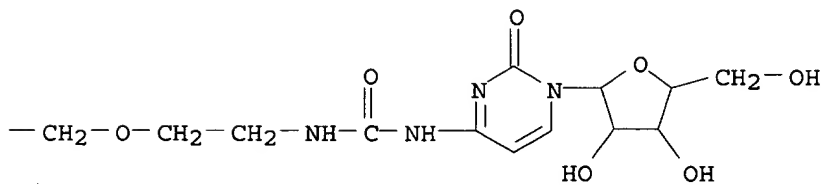
PAGE 2-A



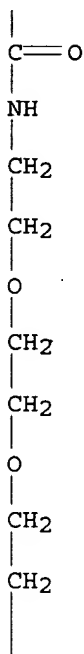
PAGE 2-B



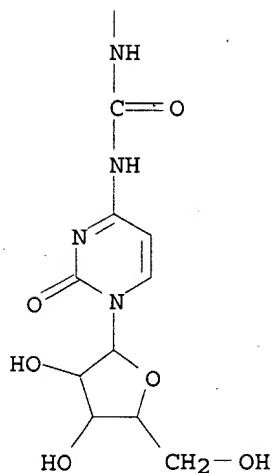
PAGE 2-C



PAGE 3-B



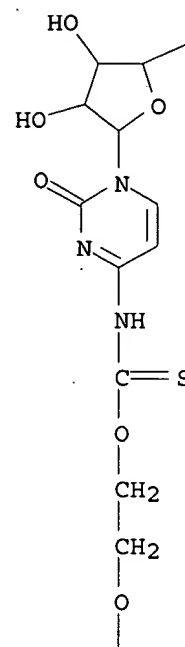
PAGE 4-B



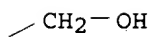
RN 396134-18-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethoxy]ethox  
 y]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

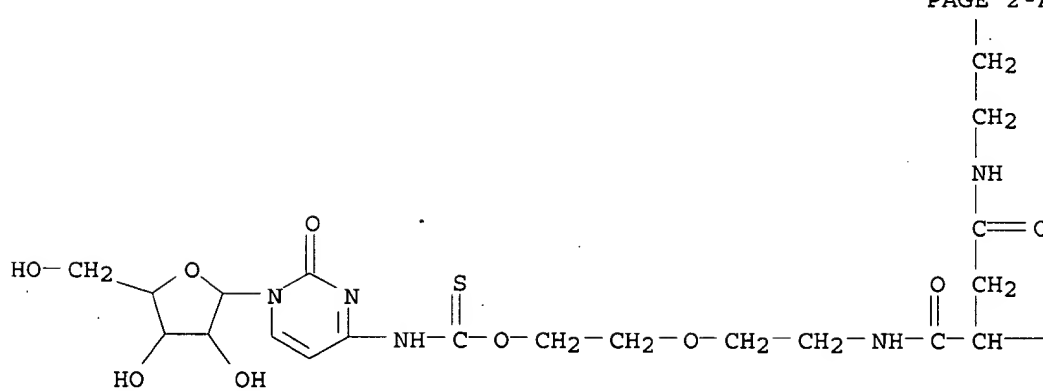
PAGE 1-A



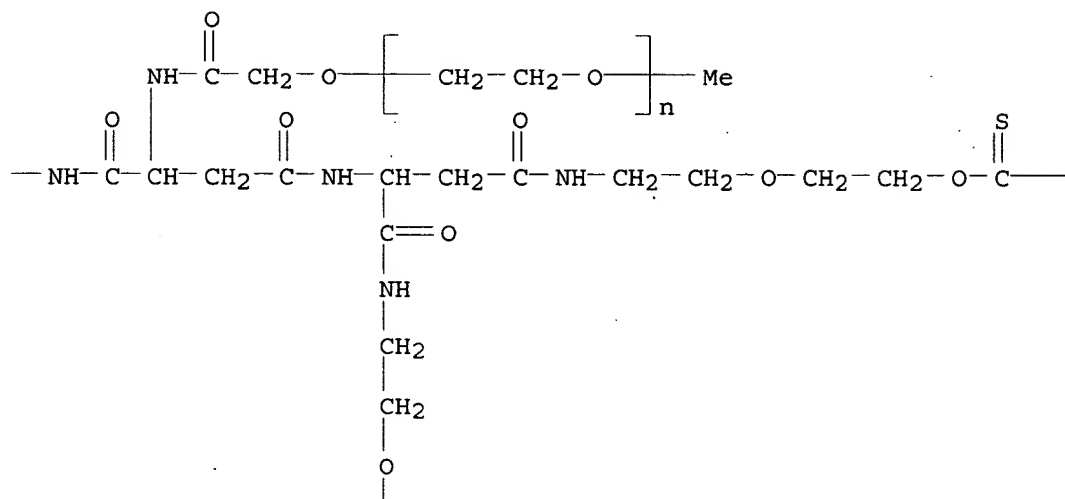
PAGE 1-B



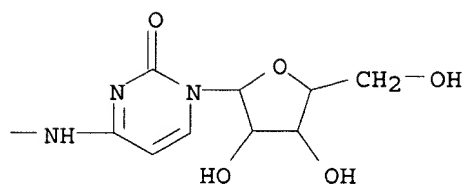
PAGE 2-A



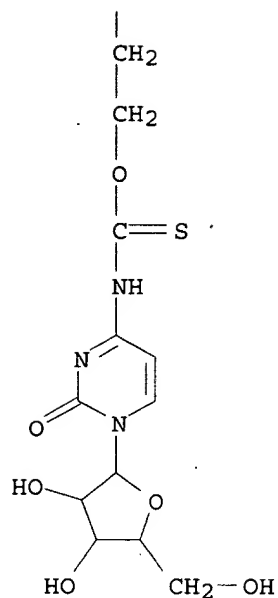
PAGE 2-B



PAGE 2-C



PAGE 3-B



RN 396134-19-3 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-  
 thioxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

PAGE 1-A

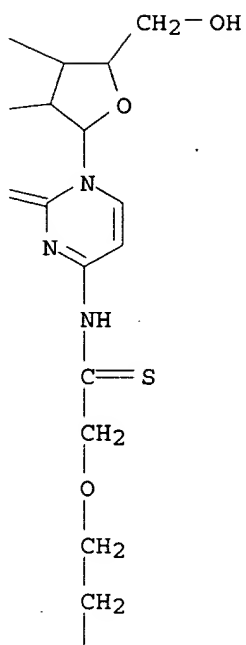
HO—

HO—

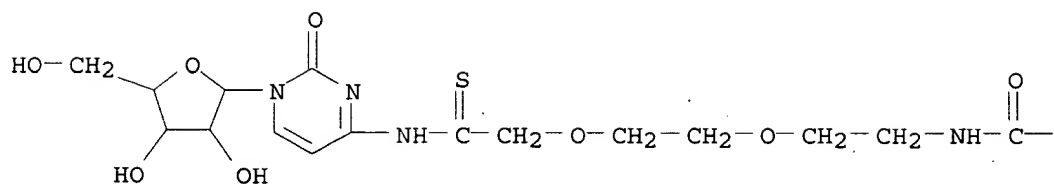
O=



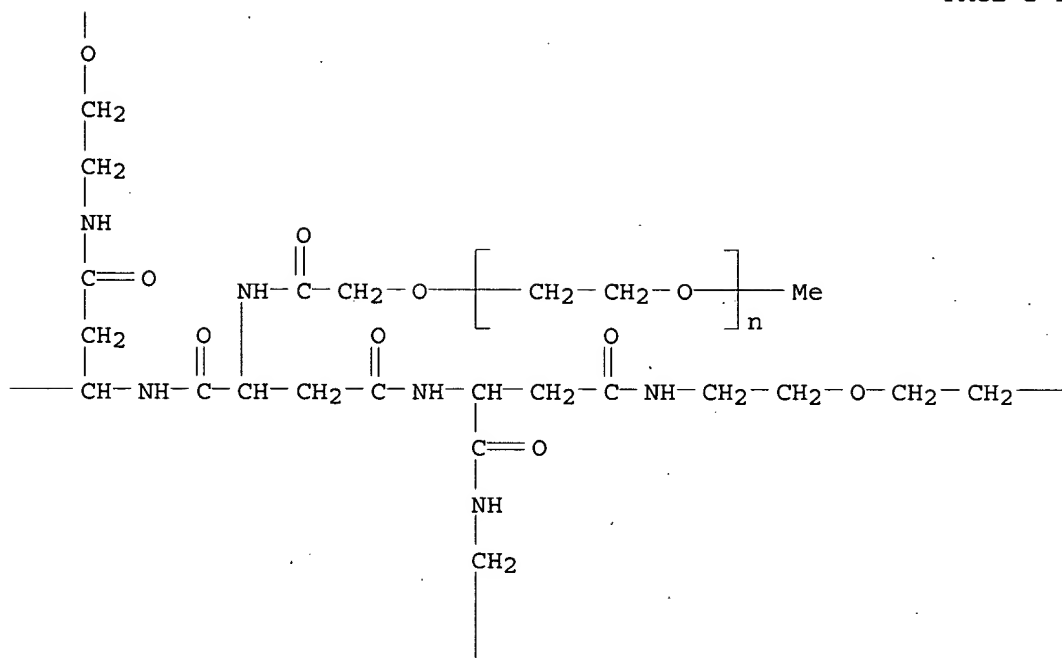
PAGE 1-B



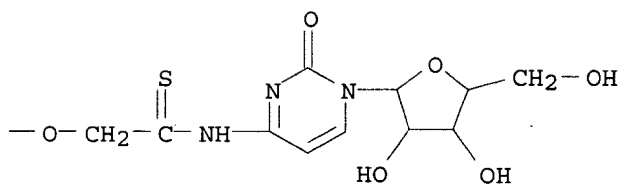
PAGE 2-A



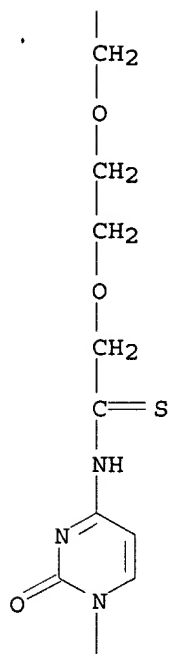
PAGE 2-B



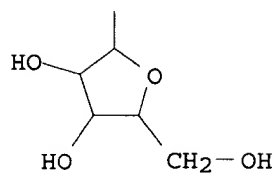
PAGE 2-C



PAGE 3-B

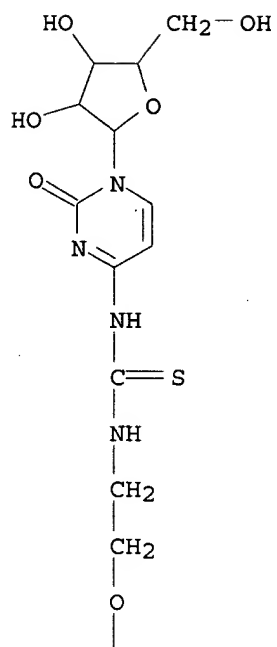


PAGE 4-B

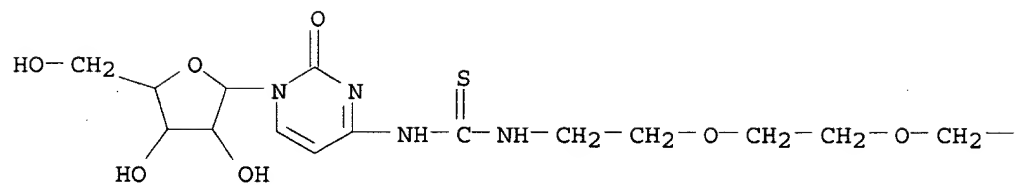


RN 396134-20-6 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[[[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethyl]amino]  
 ethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

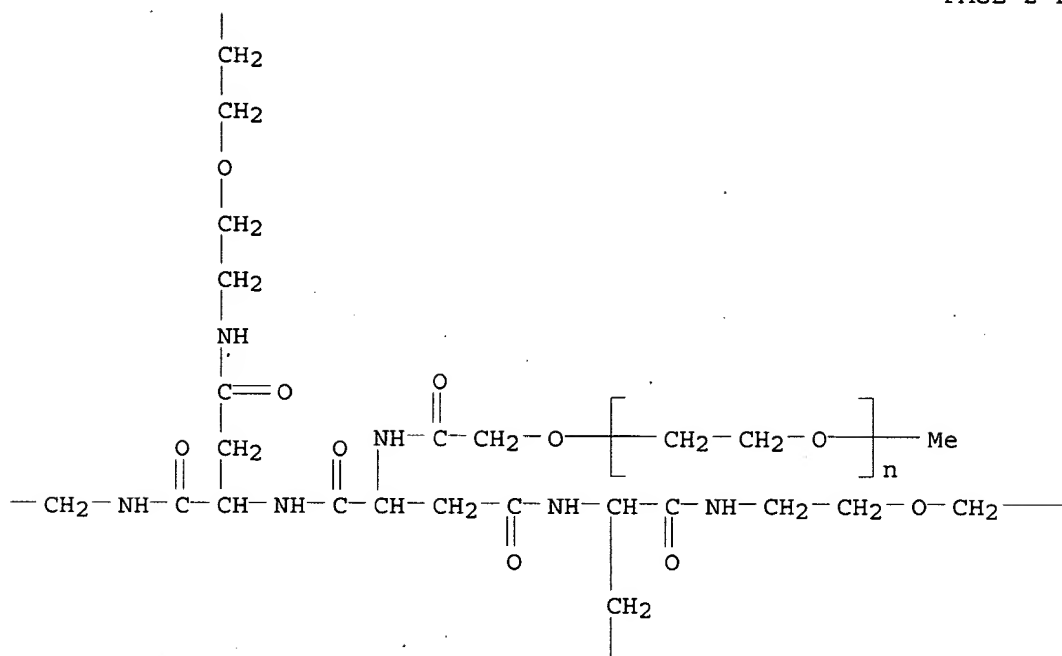
PAGE 1-B



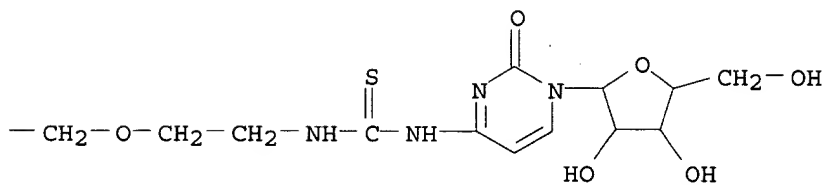
PAGE 2-A



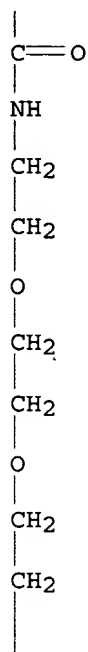
PAGE 2-B



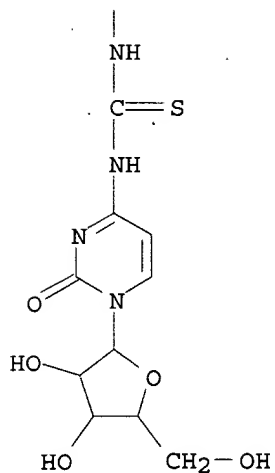
PAGE 2-C



PAGE 3-B

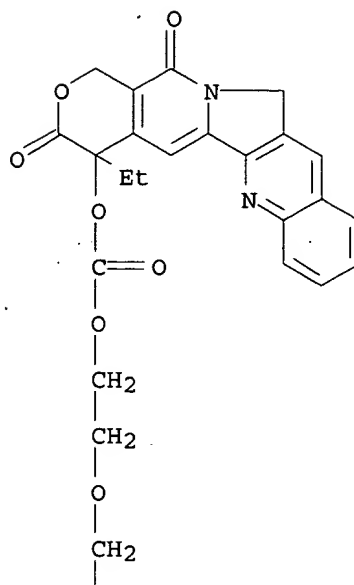


PAGE 4-B

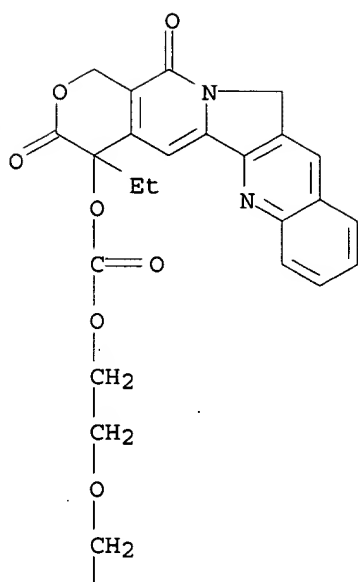


RN 396134-21-7 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with  
 hydroxyacetyl-L-aspartoylbis[N1,N4-bis[2-[2-[[[(4S)-4-ethyl-3,4,12,14-  
 tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-  
 yl]oxy]carbonyl]oxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

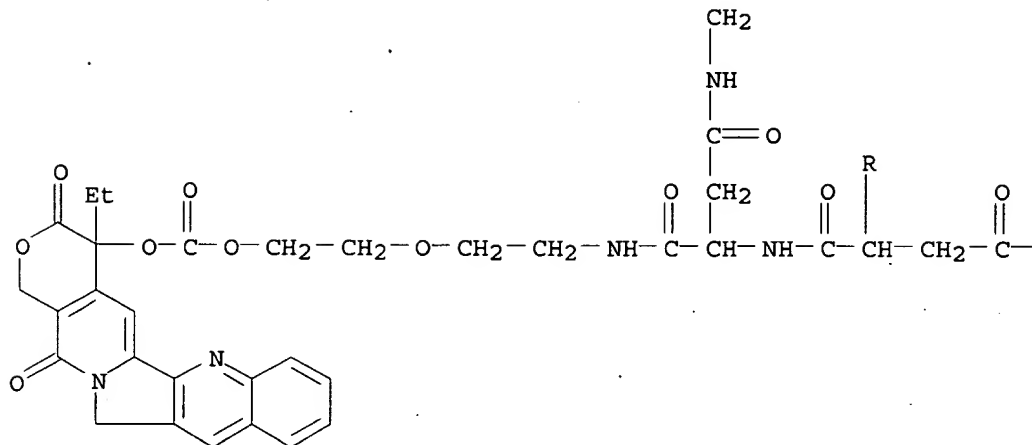
PAGE 1-A



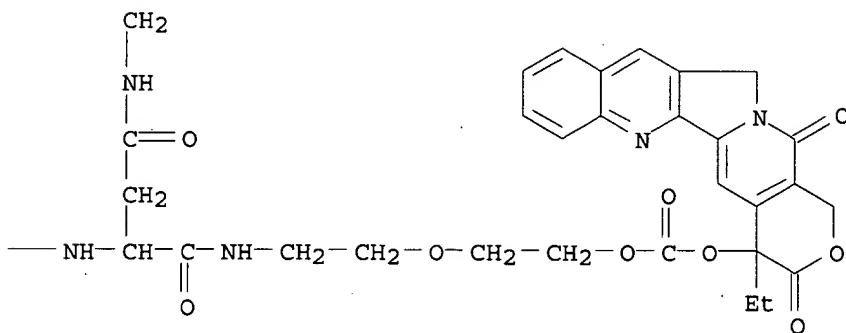
PAGE 1-B



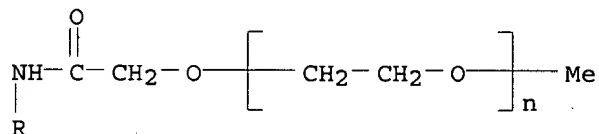
PAGE 2-A



PAGE 2-B



PAGE 3-A



IT 396134-13-7P 396134-14-8P 396134-24-0P

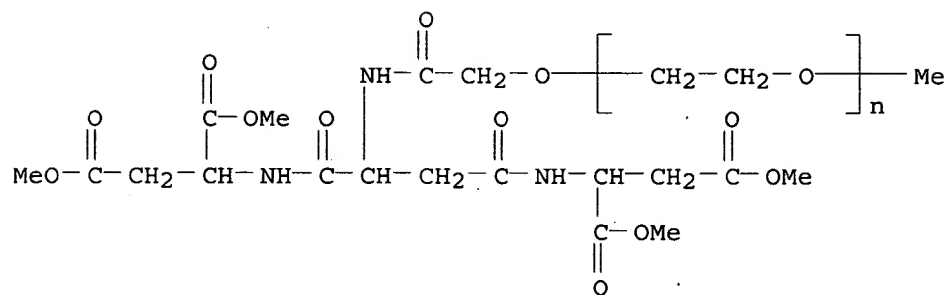
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)

RN 396134-13-7 HCAPLUS

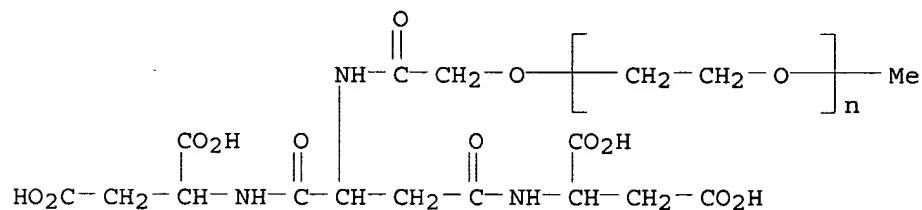
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] tetramethyl ester (9CI) (CA INDEX NAME)





RN 396134-14-8 HCAPLUS

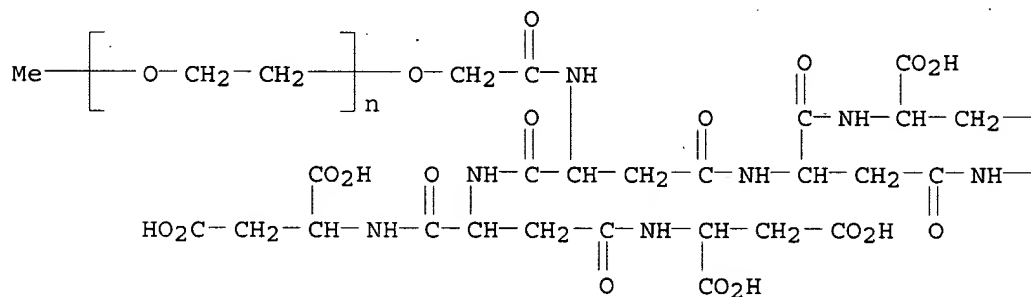
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with  
N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] (9CI) (CA INDEX NAME)



RN 396134-24-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with  
N-(hydroxyacetyl)-L-aspartoylbis[L-aspartoylbis[L-aspartic acid]] (9CI)  
(CA INDEX NAME)

PAGE 1-A



$$-\text{CO}_2\text{H}$$

$$\begin{array}{c} -\text{CH}-\text{CH}_2-\text{CO}_2\text{H} \\ | \\ \text{CO}_2\text{H} \end{array}$$

IT 367928-61-8P

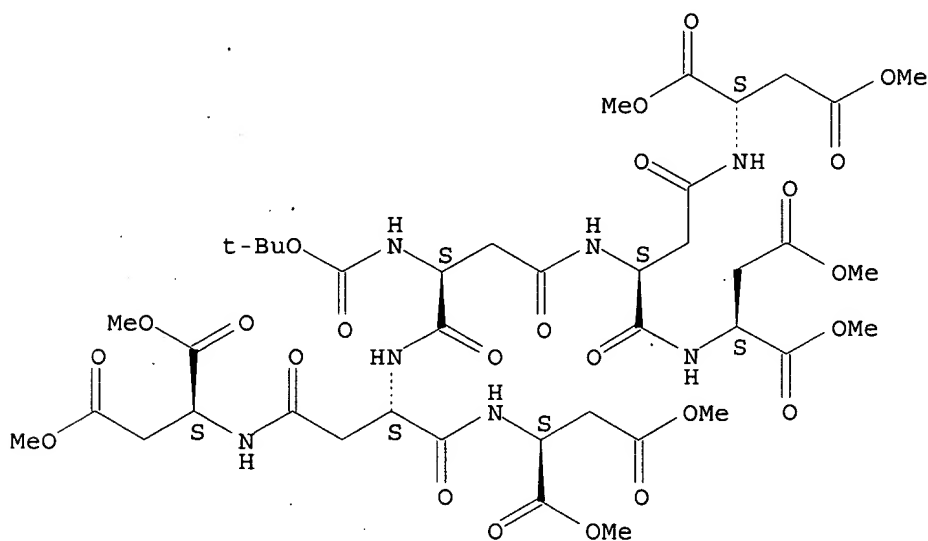
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates).

RN 367928-61-8 HCAPLUS

CN L-Aspartic acid, N-[(1,1-dimethylethoxy)carbonyl]-L-aspartoylbis[L-aspartoylbis-, octamethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:527237 HCAPLUS

DOCUMENT NUMBER: 129:172519

TITLE: Compounds comprising a linear, branched or dendritic polymer backbone for use in medical imaging

INVENTOR(S): Wolfe, Henry; Kellar, Kenneth

PATENT ASSIGNEE(S): Nycomed Imaging A/S, Norway; Golding, Louise

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

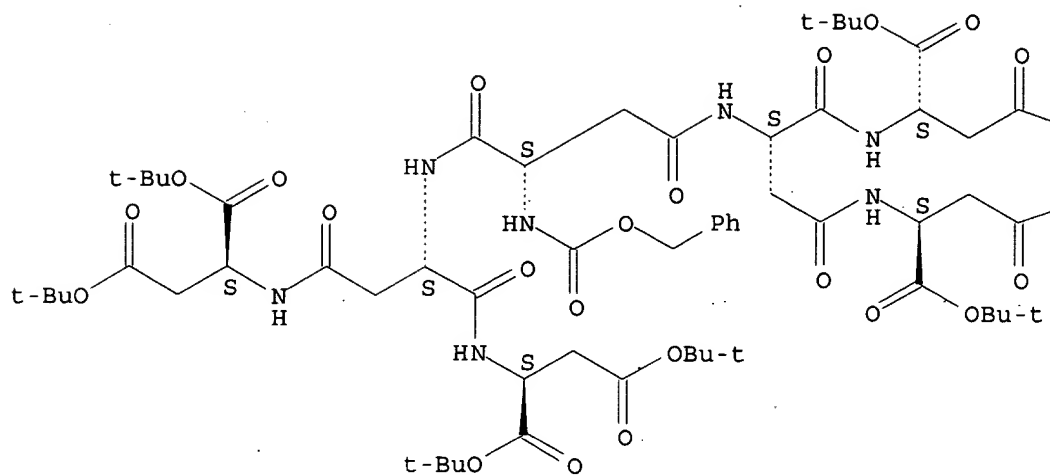
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832469	A2	19980730	WO 1998-GB270	19980129
WO 9832469	A3	19981105		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9858717	A1	19980818	AU 1998-58717	19980129
EP 1011736	A2	20000628	EP 1998-902085	19980129
R: DE, DK, ES, FR, GB, IT, SE, IE, FI				
JP 2001509796	T2	20010724	JP 1998-531761	19980129
MX 9906836	A	20000131	MX 1999-6836	19990722
NO 9903662	A	19990928	NO 1999-3662	19990728
US 2002076378	A1	20020620	US 2002-57943	20020129
PRIORITY APPLN. INFO.:				
			GB 1997-1813	A 19970129
			US 1997-57074P	P 19970827
			WO 1998-GB270	W 19980129
			US 1999-362711	A 19990729
AB	The invention provides compds. comprising a linear, branched or dendrimeric polymer backbone with linked thereto at least one reporter moiety, said polymer backbone comprising a plurality of amine-contg. acids. Such compds. may be linked to one or more targeting agents and are useful as therapeutic and diagnostic agents, in particular in medical imaging techniques.			
IC	ICM A61K049-04			
	ICS A61K049-00			
CC	8-9 (Radiation Biochemistry)			
	Section cross-reference(s): 34, 63			
IT	211176-27-1P 211176-28-2P 211176-29-3P 211176-30-6P 211365-72-9P			
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)			
	(compds. comprising a linear, branched or dendritic polymer backbone for use in medical imaging)			
IT	211176-28-2P 211176-29-3P			
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)			
	(compds. comprising a linear, branched or dendritic polymer backbone for use in medical imaging)			
RN	211176-28-2 HCAPLUS			
CN	L-Aspartic acid, N-[(phenylmethoxy)carbonyl]-L-aspartoylbis[L-aspartoylbis-, octakis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)			

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

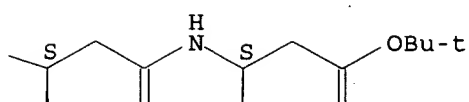
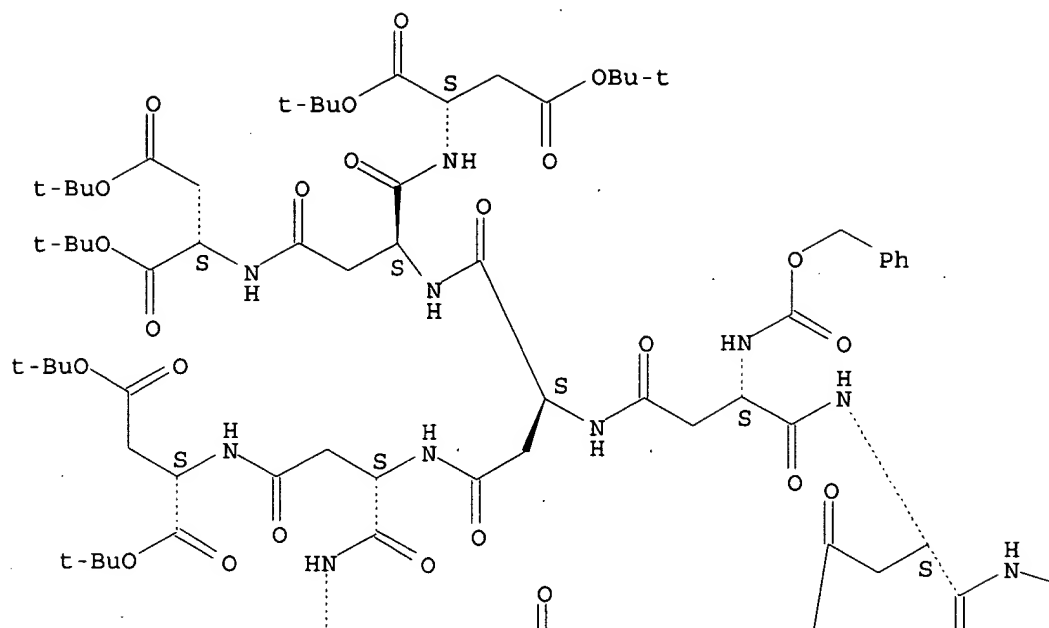
—OBu-t

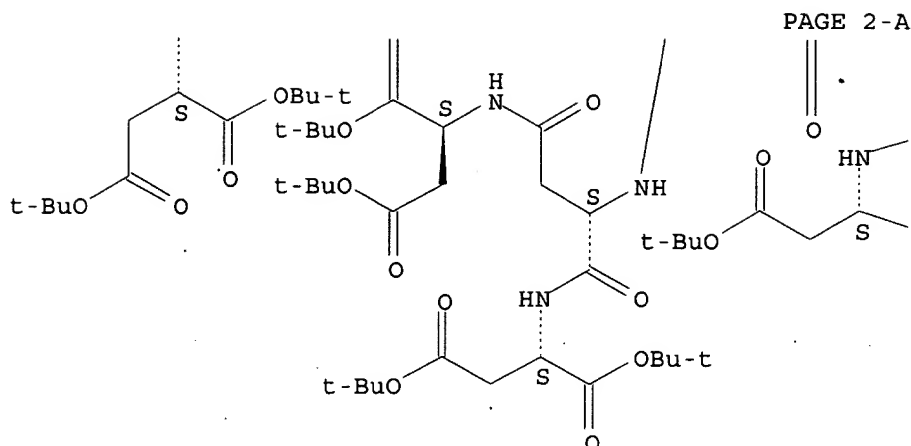
—OBu-t

RN 211176-29-3 HCAPLUS

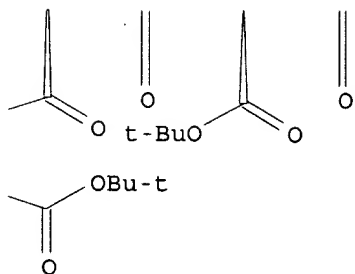
CN L-Aspartic acid, N-[(phenylmethoxy)carbonyl]-L-aspartoylbis[L-aspartoylbis[L-aspartoylbis-, hexadecakis(1,1-dimethylethyl) ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.





PAGE 2-B



L6 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:142849 HCAPLUS

DOCUMENT NUMBER: 126:251387

TITLE: Synthesis of totally chiral, multiple armed, poly Glu and poly Asp scaffoldings on bifunctional adamantane core

AUTHOR(S): Ranganathan, Darshan; Kurur, Sunita

CORPORATE SOURCE: Biomolecular Research Unit, Regional Research Laboratory (CSIR), Trivandrum, 695019, India

SOURCE: Tetrahedron Letters (1997), 38(7), 1265-1268

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Three successive generations of peptidic scaffoldings consisting of 2, 6, and 14 chiral (all L) centers and 4, 8, and 16 carbomethoxy groups, resp., at the periphery with adamantane nucleus as the central core have been constructed by linking the two halves of corresponding Asp/Glu dendrons by a 1,3-adamantanedicarboxylic acid unit. Energy minimization and  $^1\text{H}$ -NMR studies have shown these scaffoldings to adopt increasingly globular and compact architecture with each succeeding generation.

CC 34-3 (Amino Acids, Peptides, and Proteins)

IT 6384-18-5, Dimethyl aspartate 6525-53-7, Dimethyl glutamate  
 29713-15-3, 1,3-Adamantanedicarbonyl chloride 188636-64-8 188636-65-9  
 188636-66-0 188636-67-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of totally chiral, multiple armed, polyglutamate and polyaspartate scaffoldings on bifunctional adamantane core)

IT 188636-58-0P 188636-59-1P 188636-60-4P 188636-61-5P  
188636-62-6P 188636-63-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of totally chiral, multiple armed, polyglutamate and polyaspartate scaffoldings on bifunctional adamantane core)

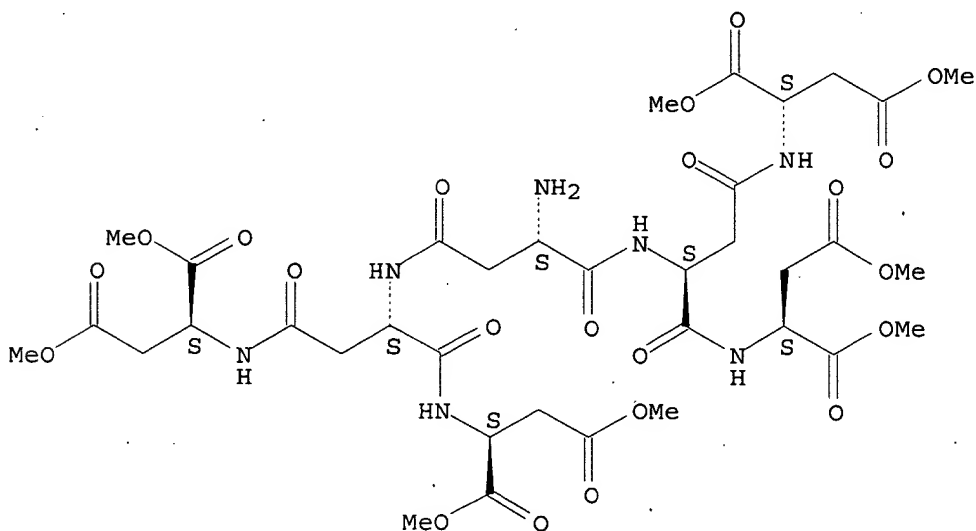
IT 188636-66-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of totally chiral, multiple armed, polyglutamate and polyaspartate scaffoldings on bifunctional adamantane core)

RN 188636-66-0 HCAPLUS

CN L-Aspartic acid, L-aspartoylbis[L-aspartoylbis-, octamethyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



IT 188636-62-6P

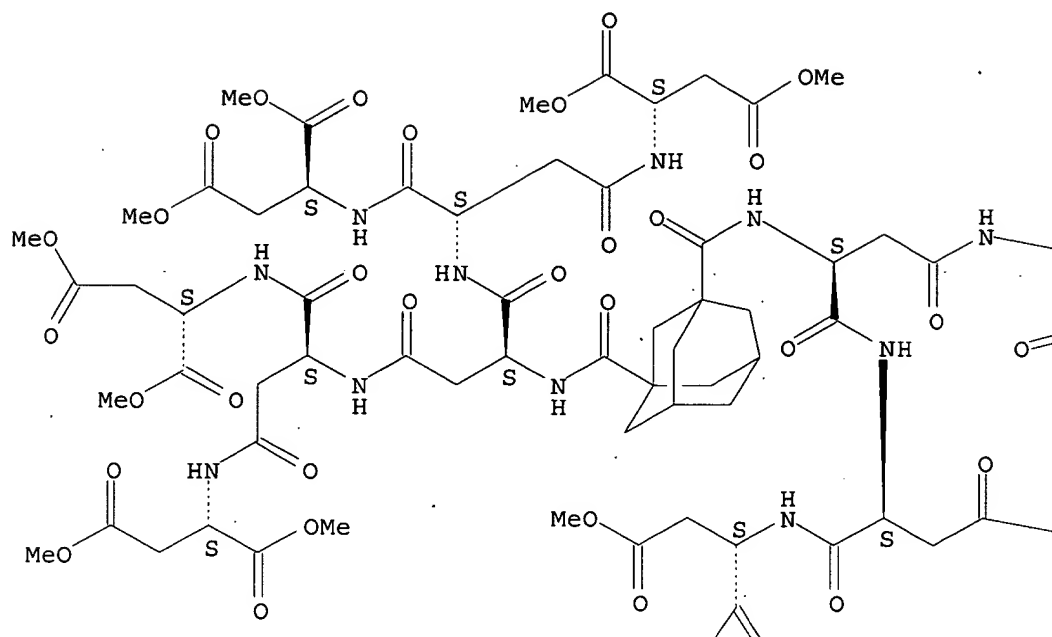
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of totally chiral, multiple armed, polyglutamate and polyaspartate scaffoldings on bifunctional adamantane core)

RN 188636-62-6 HCAPLUS

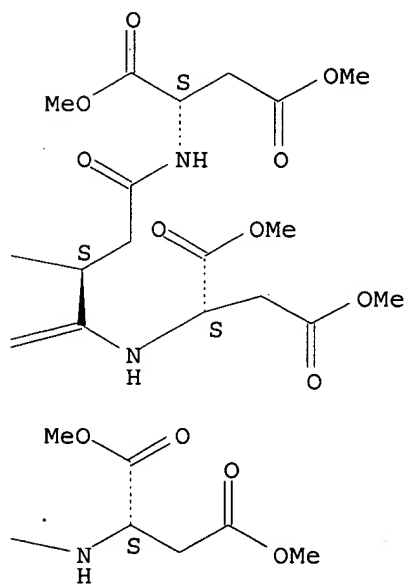
CN L-Aspartic acid, 1,1''''-(tricyclo[3.3.1.1<sup>3,7</sup>]decane-1,3-diyl)dicarbonyl)bis[L-aspartoylbis[L-aspartoylbis-, hexadecamethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

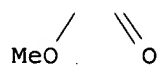
PAGE 1-A



PAGE 1-B



PAGE 2-A





L6 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:516378 HCAPLUS

DOCUMENT NUMBER: 125:248545

TITLE: Polymerizable dendrimers. Part 2. Mono-methacryl-modified dendrimers containing up to 16 ester functions via stepwise condensations of L-aspartic acids

AUTHOR(S): Niggemann, M.; Ritter, H.

CORPORATE SOURCE: Fachbereich 9, Macromolecular Chem., Bergische Univ. Gesamthochschule, Wuppertal, D-42097, Germany

SOURCE: Acta Polymerica (1996), 47(8), 351-356

CODEN: ACPODY; ISSN: 0323-7648

PUBLISHER: VCH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A convergent synthesis of polymerizable dendrimers consisting of 1 methacrylic function combined with an alkylene spacer and several condensed L-aspartic acid components is described. The highly functionalized monomers were prepd. from 11-(N-methacryloylamino)undecanoic acid via condensation with free amino groups of L-aspartic acid di-Me ester, .alpha.,.beta.-bis-(L-dimethoxyaspartyl)-L-aspartic acid hydrobromide, and .alpha.,.beta.-bis-(L-aspartyl-.alpha.,.beta.-bis-(L-dimethoxyaspartyl))-L-aspartic acid hydrobromide. The no. of ester groups increased from 2 to 4 and 8, up to 16, depending on the dendritic generation of the condensed amino acids. The monomers were homopolymd. and copolymd. with styrene through a free radical mechanism.

CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 34

IT 182197-70-2P 182197-71-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (intermediate; prepn. and polymn. of stepwise condensed dendritic monomers and macromonomers from L-aspartic acid)

IT 182197-74-6P 182197-75-7P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (monomer; prepn. and polymn. of stepwise condensed dendritic monomers and macromonomers from L-aspartic acid)

IT 182269-38-1P 182269-39-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and polymn. of stepwise condensed dendritic monomers and macromonomers from L-aspartic acid)

IT 182197-70-2P 182197-71-3P

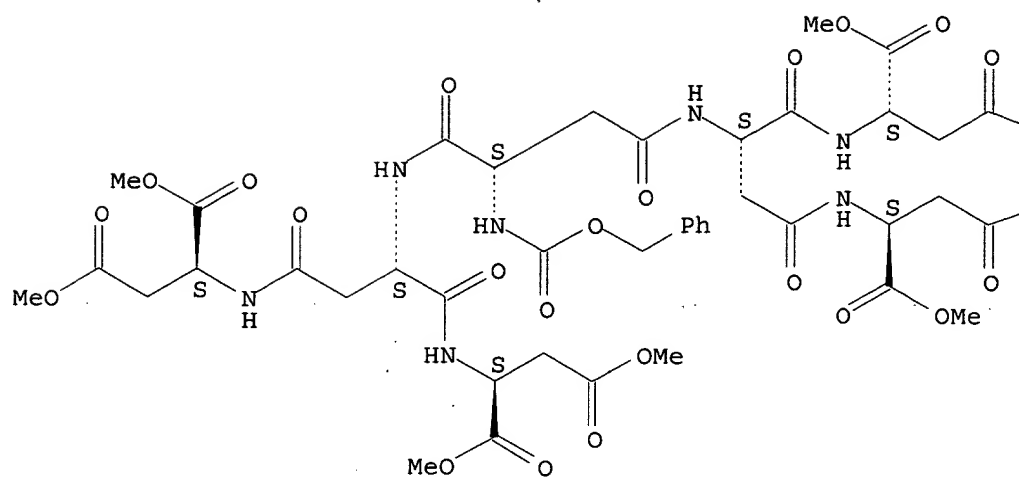
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (intermediate; prepn. and polymn. of stepwise condensed dendritic monomers and macromonomers from L-aspartic acid)

RN 182197-70-2 HCAPLUS

CN L-Aspartic acid, N-[(phenylmethoxy)carbonyl]-L-aspartoylbis[L-aspartoylbis-, octamethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

— OMe

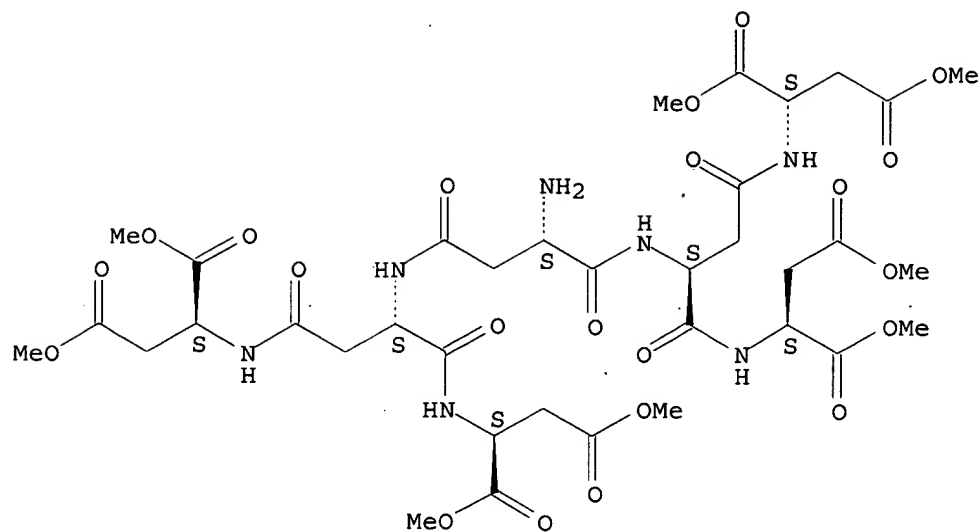
— OMe

RN 182197-71-3 HCAPLUS

CN L-Aspartic acid, L-aspartoylbis[L-aspartoylbis-, octamethyl ester, monohydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● HBr

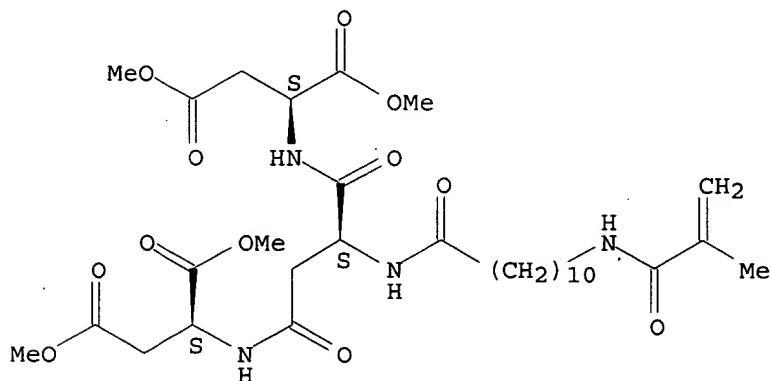
IT 182197-74-6P 182197-75-7P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (monomer; prepn. and polymn. of stepwise condensed dendritic monomers and macromonomers from L-aspartic acid)

RN 182197-74-6 HCAPLUS

CN L-Aspartic acid, N-[11-[(2-methyl-1-oxo-2-propenyl)amino]-1-oxoundecyl]-L-aspartoylbis-, tetramethyl ester (9CI) (CA INDEX NAME)

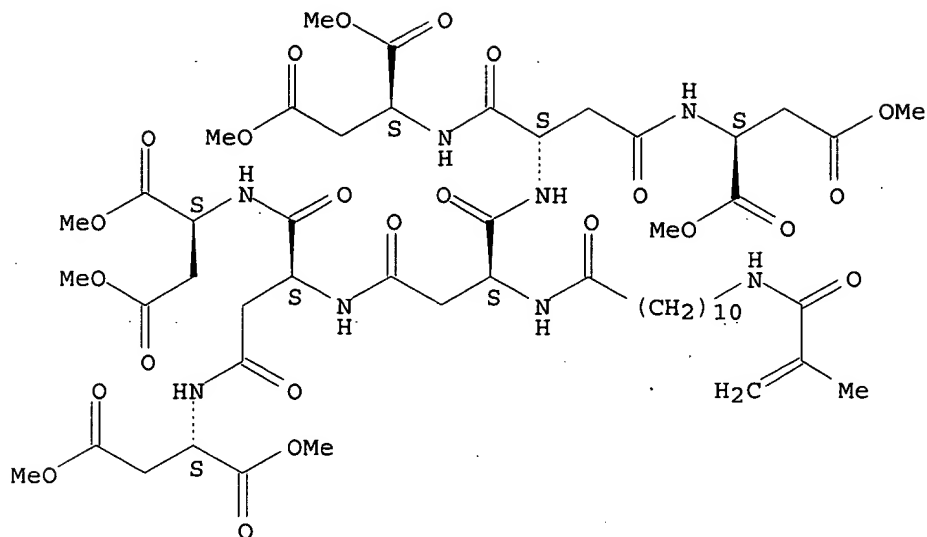
Absolute stereochemistry.



RN 182197-75-7 HCAPLUS

CN L-Aspartic acid, N-[11-[(2-methyl-1-oxo-2-propenyl)amino]-1-oxoundecyl]-L-aspartoylbis[L-aspartoylbis-, octamethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 182269-38-1P 182269-39-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and polymn. of stepwise condensed dendritic monomers and  
 macromonomers from L-aspartic acid)

RN 182269-38-1 HCAPLUS

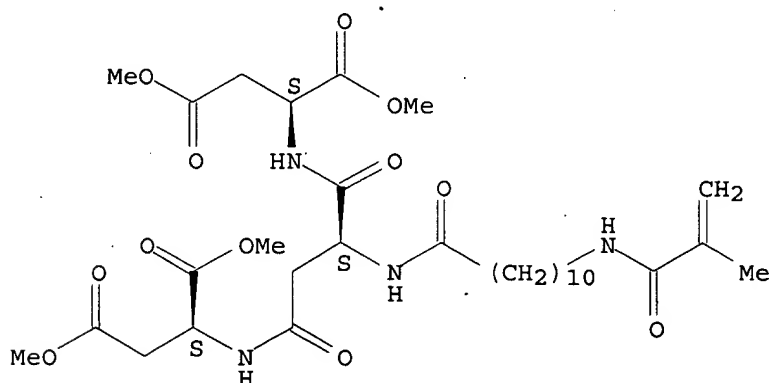
CN L-Aspartic acid, N-[11-[(2-methyl-1-oxo-2-propenyl)amino]-1-oxoundecyl]-L-  
 aspartoylbis-, tetramethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 182197-74-6

CMF C31 H50 N4 O12

Absolute stereochemistry.



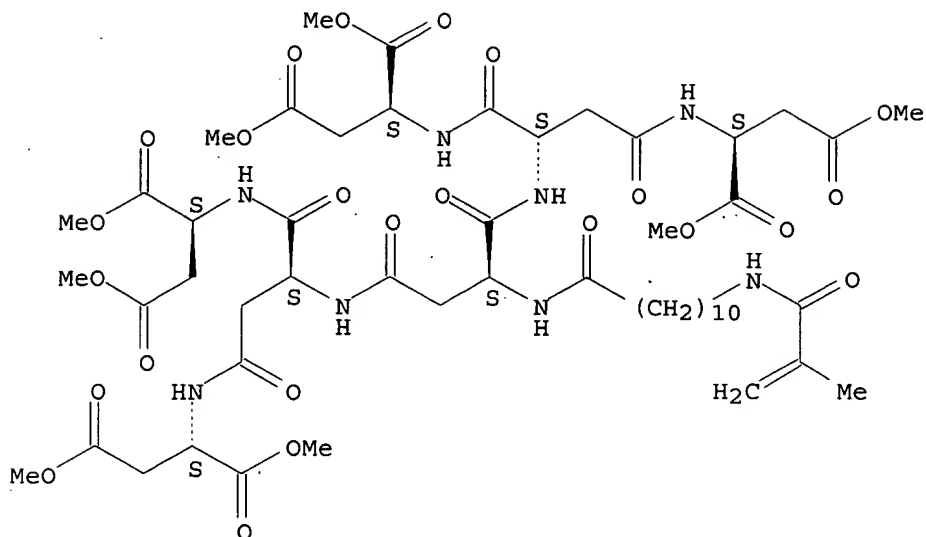
RN 182269-39-2 HCAPLUS

CN L-Aspartic acid, N-[11-[(2-methyl-1-oxo-2-propenyl)amino]-1-oxoundecyl]-L-  
 aspartoylbis[L-aspartoylbis-, octamethyl ester, polymer with  
 ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 182197-75-7  
CMF C51 H78 N8 O24

Absolute stereochemistry.



CM 2

CRN 100-42-5  
CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

L6 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:6155 HCAPLUS

DOCUMENT NUMBER: 114:6155

TITLE: Preparation of metalloporphyrins useful in diagnosis and treatment of cancer

INVENTOR(S): Sakata, Isao; Nakajima, Susumu; Koshimizu, Koichi; Takada, Hiroyuki; Inui, Hiroshi

PATENT ASSIGNEE(S): Toyo Hakka Kogyo Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 48 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

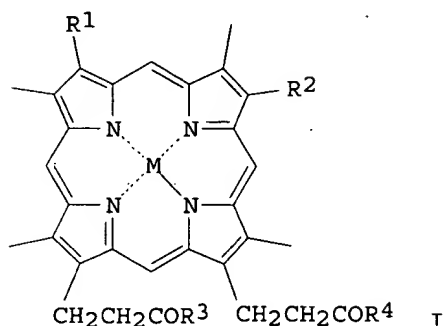
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 350948	A2	19900117	EP 1989-112955	19890714
EP 350948	A3	19910605		
EP 350948	B1	19980318		
R: CH, DE, FR, GB, IT, LI				
JP 02138280	A2	19900528	JP 1989-146615	19890612

JP 2520735 B2 19960731  
 PRIORITY APPLN. INFO.: JP 1988-173835 19880714  
 JP 1989-146615 19890612  
 OTHER SOURCE(S): MARPAT 114:6155  
 GI



AB Title compds. I (R1, R2 = H2C:CH, Me(RO)CH, Me(RO-alkylene-O)CH; R3, R4 = HO or a residue obtained by removing a H from a polyfunctional compd.; R = H, alkenyl, alkyl, perfluoroalkyl, cyclic compd., or a residue obtained by removing a H from a polyfunctional compd.; M = metal) are prepd. To I [R1, R2 = 1-(decyloxy)ethyl; R3, R4 = OH; M = Mn] dicyclohexylamine salt were added and dissolved CHCl3 and MeCN, and to the resultant soln. were added H-Asp(OMe)-OH.HCl and 10% DCC/CHCl3 with stirring to give I [R1, R2 = 1-(decyloxy)ethyl; R3, R4 = aspartyl; M = Mn] (II). Tumor bearing hamsters given II 10 mg/mL dild. by phosphate buffer at 25 mg/kg, resulted in tumor growth inhibitory effect compared to controls, indicating a carcinostatic activity.

IC ICM C07D487-22

ICS A61K031-40; A61K049-00

ICI C07D487-22, C07D257-00, C07D209-00

CC 26-7 (Biomolecules and Their Synthetic Analogs)

Section cross-reference(s): 1, 34

IT 553-12-8DP, manganese complexes 31444-62-9DP, gallium complexes  
 129639-22-1DP, gallium complexes 129639-23-2DP, gallium complexes  
 129639-24-3DP, gallium complexes 129639-25-4DP, gallium complexes  
 129639-26-5DP, gallium complexes 129639-27-6DP, gallium complexes  
 129639-28-7DP, gallium complexes 129639-29-8DP, gallium complexes  
 129639-30-1DP, gallium complexes 129639-31-2DP, gallium complexes  
 129669-45-0DP, gallium complexes 129669-46-1DP, manganese complexes  
 129669-47-2DP, gallium complexes 129669-48-3DP, gallium complexes  
 129669-51-8DP, gallium complexes 129669-52-9DP, gallium complexes  
 129735-26-8DP, manganese complexes 129868-94-6P 129901-27-5DP, gallium  
 complexes 129901-27-5DP, manganese complexes 129901-28-6DP, gallium  
 complexes 129901-28-6DP, manganese complexes 129901-29-7DP, gallium  
 complexes 129901-29-7DP, manganese complexes 129901-30-0DP, gallium  
 complexes 129901-30-0DP, manganese complexes 129901-31-1DP, gallium  
 complexes 129901-32-2DP, gallium complexes 129901-33-3DP, gallium  
 complexes 129901-34-4DP, gallium complexes 129901-35-5DP, gallium  
 complexes 129901-36-6DP, gallium complexes 129901-37-7DP, gallium  
 complexes 129901-38-8DP, Mn complexes 129901-38-8DP, cobalt complexes  
 129901-38-8DP, gallium complexes 129901-38-8P 129901-39-9DP, Mn  
 complexes 129901-39-9DP, cobalt complexes 129901-39-9DP, copper  
 complexes 129901-39-9DP, gallium complexes 129901-39-9DP, iron  
 complexes 129901-39-9P 129901-40-2DP, gallium complexes

129901-41-3DP, gallium complexes 129901-42-4DP, gallium complexes  
 129901-43-5DP, gallium complexes 129901-44-6DP, gallium complexes  
 129901-45-7DP, gallium complexes 129901-46-8DP, gallium complexes  
 129901-47-9DP, gallium complexes 129901-48-0DP, Mn complexes  
 129901-48-0DP, gallium complexes 129901-49-1DP, gallium complexes  
 129901-51-5DP, gallium complexes 129901-52-6DP, gallium complexes  
 129901-53-7DP, gallium complexes 129901-54-8DP, gallium complexes  
 129901-55-9DP, gallium complexes 129901-56-0DP, gallium complexes  
 129901-57-1DP, gallium complexes 129901-58-2DP, Mn complexes  
 129901-58-2DP, gallium complexes 129901-59-3DP, Mn complexes  
 129901-59-3DP, cobalt complexes 129901-59-3DP, gallium complexes  
 129901-60-6DP, gallium complexes 129901-60-6DP, manganese complexes  
 129901-60-6P 129901-61-7DP, gallium complexes 129901-61-7DP, manganese  
 complexes 129901-62-8DP, gallium complexes 129901-63-9DP, cobalt  
 complexes 129901-63-9DP, copper complexes 129901-63-9DP, gallium  
 complexes 129901-63-9DP, iron complexes 129901-63-9DP, manganese  
 complexes 129901-64-0DP, gallium complexes 129901-66-2DP, gallium  
 complexes 129901-66-2DP, manganese complexes 129901-67-3DP, gallium  
 complexes 129901-67-3DP, manganese complexes 129901-68-4DP, Mn  
 complexes 129901-68-4P 129901-69-5DP, Mn complexes 129901-69-5P  
 129901-70-8DP, Mn complexes 129901-70-8P 129901-72-0DP, gallium  
 complexes 129901-72-0DP, manganese complexes 129901-73-1DP, manganese  
 complexes 129901-75-3DP, Mn complexes 129901-75-3DP, gallium complexes  
 129901-75-3DP, iron complexes 129901-76-4DP, Mn complexes  
 129901-77-5DP, Mn complexes 129901-78-6DP, Mn complexes 129901-79-7DP,  
 Mn complexes 129901-80-0DP, Mn complexes 129901-81-1DP, Mn complexes  
 129901-82-2DP, Mn complexes 129901-83-3DP, Mn complexes 129901-84-4DP,  
 Mn complexes 129901-85-5DP, Mn complexes 129901-87-7DP, manganese  
 complexes 129901-87-7P 129901-88-8DP, manganese complexes  
 129901-89-9DP, manganese complexes 129901-89-9P 129901-90-2DP,  
 manganese complexes 129901-90-2P 129901-91-3DP, manganese complexes  
 129901-91-3P 129901-92-4DP, gallium complexes 129901-92-4DP, manganese  
 complexes 129901-92-4P 129901-93-5DP, manganese complexes  
 129901-94-6DP, manganese complexes 129901-97-9DP, manganese complexes  
 129901-98-0DP, manganese complexes 129901-99-1DP, manganese complexes  
 129901-99-1P 129902-00-7DP, manganese complexes 129902-01-8DP,  
 manganese complexes 129902-02-9DP, manganese complexes 129902-03-0DP,  
 manganese complexes 129902-42-7DP, gallium complexes 129902-42-7DP,  
 iron complexes 129926-28-9DP, gallium complexes 129926-29-0DP, gallium  
 complexes 129926-30-3DP, gallium complexes 129926-30-3DP, manganese  
 complexes 129926-31-4DP, iron complexes 129926-31-4DP, manganese  
 complexes 129926-32-5DP, manganese complexes 129926-33-6DP, manganese  
 complexes 129926-34-7DP, manganese complexes 129926-35-8DP, manganese  
 complexes 129926-36-9DP, manganese complexes 129926-37-0DP, manganese  
 complexes 129996-41-4DP, gallium complexes 130593-79-2DP, manganese  
 complexes

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)  
 (prepn. of, as antitumor agent)

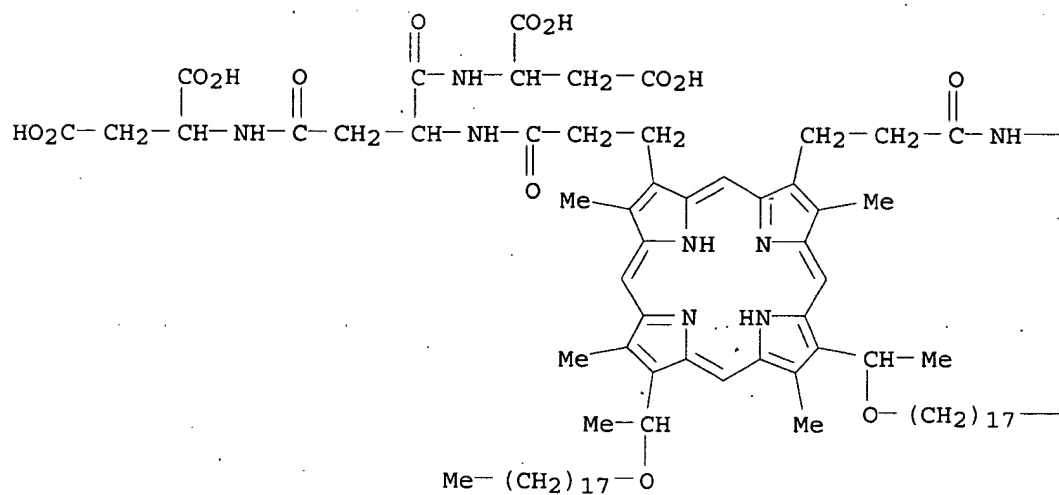
IT 129901-93-5DP, manganese complexes

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)  
 (prepn. of, as antitumor agent)

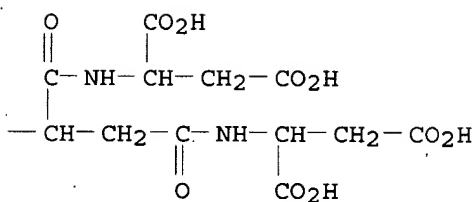
RN 129901-93-5 HCAPLUS

CN L-Aspartic acid, 1,1'-[[3,7,12,17-tetramethyl-8,13-bis[1-(octadecyloxy)ethyl]-21H,23H-porphine-2,18-diyl]bis(1-oxo-3,1-propanediyl)]bis[L-aspartoylbis-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



— Me

L18 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:376579 HCAPLUS

DOCUMENT NUMBER: 138:390913

TITLE: Polymeric thiol-linked prodrugs

INVENTOR(S): Choe, Yun Hwang; Greenwald, Richard B.

PATENT ASSIGNEE(S): Enzon, Inc., USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003039479	A2	20030515	WO 2002-US35868	20021108
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 2001-344914P	P 20011109
			US 2002-367320P	P 20020325
OTHER SOURCE(S): MARPAT 138:390913				
AB	Thiol-linked polymeric prodrugs and methods of making and using the same are disclosed. The use of a sulfhydryl bond as the basic link for linking the polymer to the drug allows a prodrug to be formed which takes advantage of plasma enzymes in vivo. A preferred conjugate is a PEG-6-MP conjugate (prepn. given), showing roughly 25-35% redn. in tumor growth as compared to 6-MP.			
IC	ICM A61K			
CC	63-6 (Pharmaceuticals)			
	Section cross-reference(s): 1, 35			
ST	<b>polymer conjugate</b> thiol link <b>prodrug</b> prepn;			
	mercaptapurine polyethylene glycol <b>conjugate</b> prepn antitumor			
IT	<b>Polymer</b> degradation kinetics (hydrolytic; prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	Antitumor agents (prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	<b>Drug delivery</b> systems ( <b>prodrugs</b> ; prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	452369-71-0P	524961-31-7P	524961-33-9P	524961-36-2P 524961-39-5P 524961-41-9P
	RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	50-44-2, 6-Mercaptopurine hydrochloride	1791-13-5, Aspartic acid di-tert-butyl ester hydrochloride	3303-84-2	5292-43-3, tert-Butyl bromoacetate
	13726-67-5	14358-33-9, Aspartic acid dimethyl ester hydrochloride	24277-39-2	136586-99-7 204133-25-5 259802-47-6
	RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	608-09-3P	150109-41-4P	150109-43-6P	152293-46-4P 153354-68-8P
	167082-77-1P	188636-64-8P	396134-22-8P	452369-72-1P
	474083-07-3P	474083-09-5P	524961-30-6P	524961-32-8P
	524961-35-1P	524961-37-3P	524961-38-4P	
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	<b>524961-40-8P</b> RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of <b>polymeric</b> thiol-linked <b>prodrugs</b> )			
IT	<b>524961-41-9P</b>			

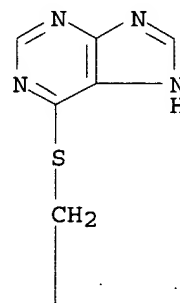
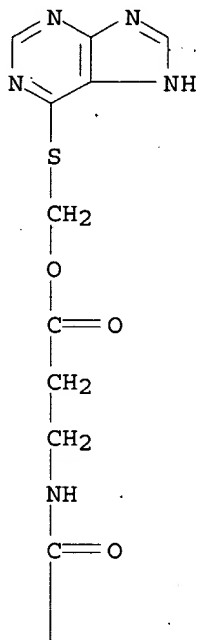
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polymeric thiol-linked prodrugs)

RN 524961-41-9 HCAPLUS

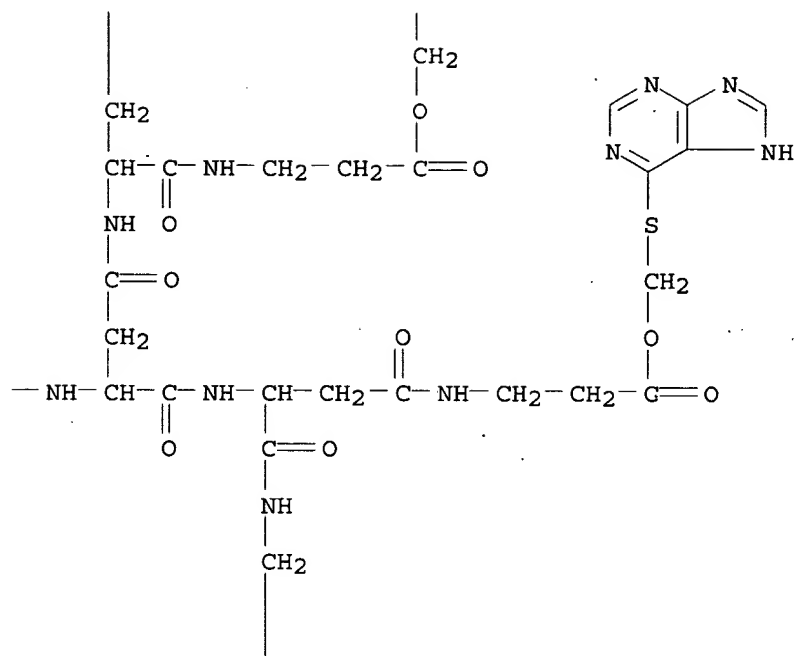
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with hydroxyacetyl-L-aspartoylbis[L-aspartoylbis[L-aspartoylbis[.beta.-alanine]]] octakis[(1H-purin-6-ylthio)methyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

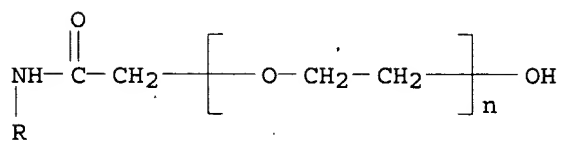
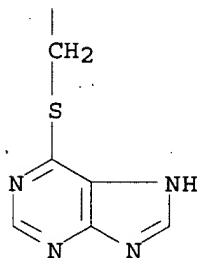


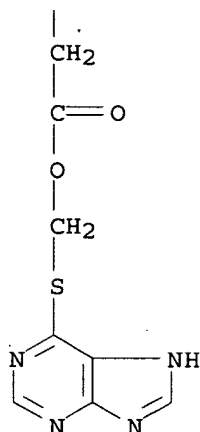


PAGE 2-B



PAGE 3-A





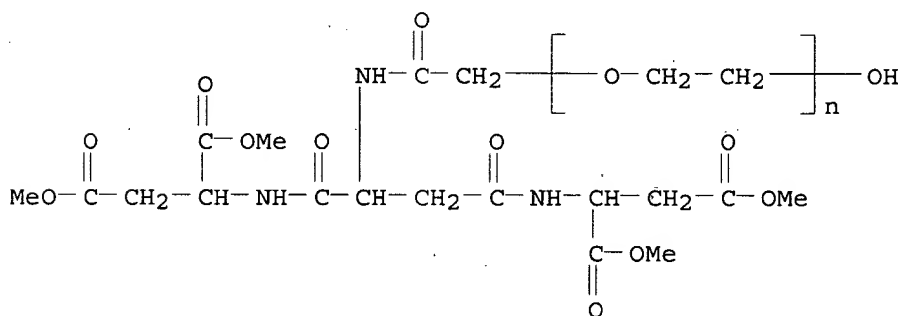
IT 474083-07-3P 474083-09-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of **polymeric** thiol-linked **prodrugs**)

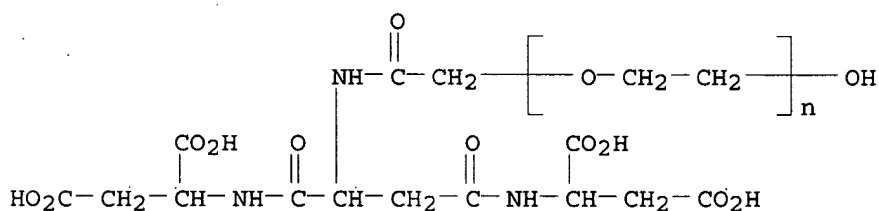
RN 474083-07-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] tetramethyl ester (9CI) (CA INDEX NAME)



RN 474083-09-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] (9CI) (CA INDEX NAME)



IT 524961-40-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

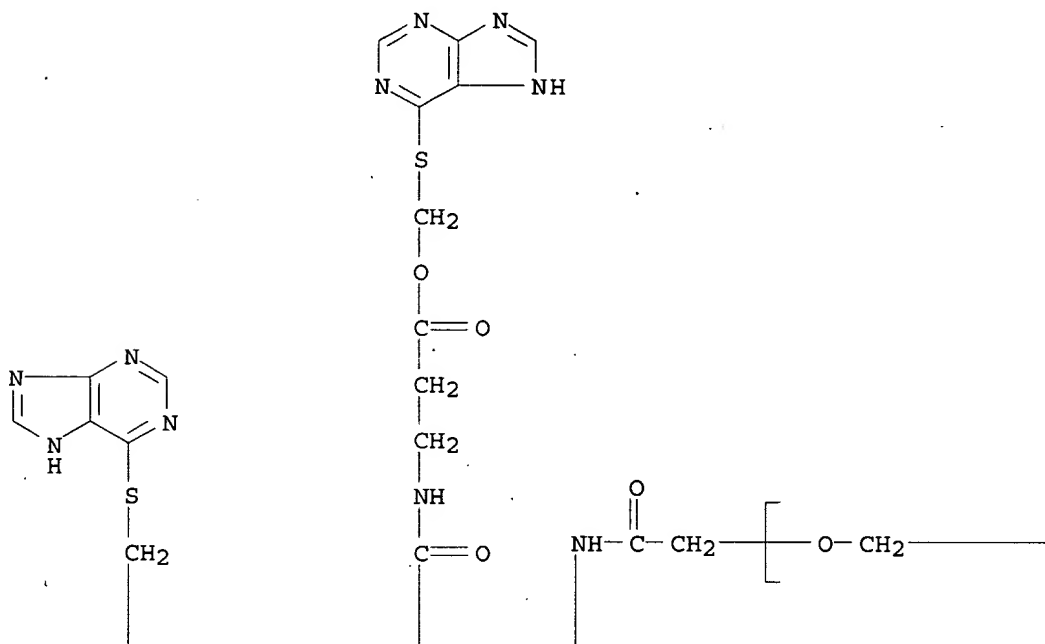
```

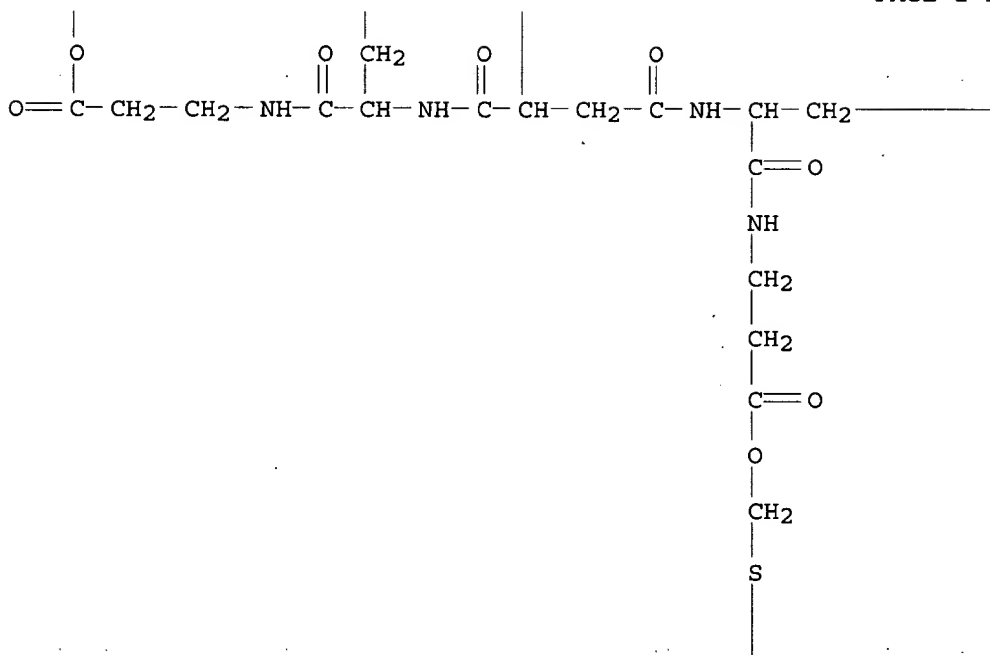
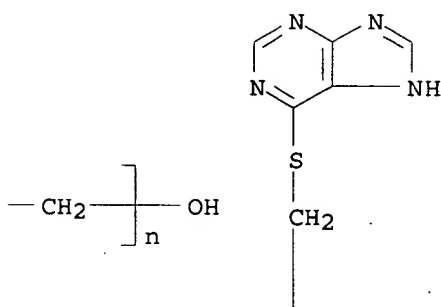
      1177; 1181; 1185; 1189; 1193; 1197; 1201; 1205; 1209; 1213; 1217; 1221; 1225; 1229; 1233; 1237; 1241; 1245; 1249; 1253; 1257; 1261; 1265; 1269; 1273; 1277; 1281; 1285; 1289; 1293; 1297; 1301; 1305; 1309; 1313; 1317; 1321; 1325; 1329; 1333; 1337; 1341; 1345; 1349; 1353; 1357; 1361; 1365; 1369; 1373; 1377; 1381; 1385; 1389; 1393; 1397; 1401; 1405; 1409; 1413; 1417; 1421; 1425; 1429; 1433; 1437; 1441; 1445; 1449; 1453; 1457; 1461; 1465; 1469; 1473; 1477; 1481; 1485; 1489; 1493; 1497; 1501; 1505; 1509; 1513; 1517; 1521; 1525; 1529; 1533; 1537; 1541; 1545; 1549; 1553; 1557; 1561; 1565; 1569; 1573; 1577; 1581; 1585; 1589; 1593; 1597; 1601; 1605; 1609; 1613; 1617; 1621; 1625; 1629; 1633; 1637; 1641; 1645; 1649; 1653; 1657; 1661; 1665; 1669; 1673; 1677; 1681; 1685; 1689; 1693; 1697; 1701; 1705; 1709; 1713; 1717; 1721; 1725; 1729; 1733; 1737; 1741; 1745; 1749; 1753; 1757; 1761; 1765; 1769; 1773; 1777; 1781; 1785; 1789; 1793; 1797; 1801; 1805; 1809; 1813; 1817; 1821; 1825; 1829; 1833; 1837; 1841; 1845; 1849; 1853; 1857; 1861; 1865; 1869; 1873; 1877; 1881; 1885; 1889; 1893; 1897; 1901; 1905; 1909; 1913; 1917; 1921; 1925; 1929; 1933; 1937; 1941; 1945; 1949; 1953; 1957; 1961; 1965; 1969; 1973; 1977; 1981; 1985; 1989; 1993; 1997; 2001; 2005; 2009; 2013; 2017; 2021; 2025; 2029; 2033; 2037; 2041; 2045; 2049; 2053; 2057; 2061; 2065; 2069; 2073; 2077; 2081; 2085; 2089; 2093; 2097; 2101; 2105; 2109; 2113; 2117; 2121; 2125; 2129; 2133; 2137; 2141; 2145; 2149; 2153; 2157; 2161; 2165; 2169; 2173; 2177; 2181; 2185; 2189; 2193; 2197; 2201; 2205; 2209; 2213; 2217; 2221; 2225; 2229; 2233; 2237; 2241; 2245; 2249; 2253; 2257; 2261; 2265; 2269; 2273; 2277; 2281; 2285; 2289; 2293; 2297; 2301; 2305; 2309; 2313; 2317; 2321; 2325; 2329; 2333; 2337; 2341; 2345; 2349; 2353; 2357; 2361; 2365; 2369; 2373; 2377; 2381; 2385; 2389; 2393; 2397; 2401; 2405; 2409; 2413; 2417; 2421; 2425; 2429; 2433; 2437; 2441; 2445; 2449; 2453; 2457; 2461; 2465; 2469; 2473; 2477; 2481; 2485; 2489; 2493; 2497; 2501; 2505; 2509; 2513; 2517; 2521; 2525; 2529; 2533; 2537; 2541; 2545; 2549; 2553; 2557; 2561; 2565; 2569; 2573; 2577; 2581; 2585; 2589; 2593; 2597; 2601; 2605; 2609; 2613; 2617; 2621; 2625; 2629; 2633; 2637; 2641; 2645; 2649; 2653; 2657; 2661; 2665; 2669; 2673; 2677; 2681; 2685; 2689; 2693; 2697; 2701; 2705; 2709; 2713; 2717; 2721; 2725; 2729; 2733; 2737; 2741; 2745; 2749; 2753; 2757; 2761; 2765; 2769; 2773; 2777; 2781; 2785; 2789; 2793; 2797; 2801; 2805; 2809; 2813; 2817; 2821; 2825; 2829; 2833; 2837; 2841; 2845; 2849; 2853; 2857; 2861; 2865; 2869; 2873; 2877; 2881; 2885; 2889; 2893; 2897; 2901; 2905; 2909; 2913; 2917; 2921; 2925; 2929; 2933; 2937; 2941; 2945; 2949; 2953; 2957; 2961; 2965; 2969; 2973; 2977; 2981; 2985; 2989; 2993; 2997; 3001; 3005; 3009; 3013; 3017; 3021; 3025; 3029; 3033; 3037; 3041; 3045; 3049; 3053; 3057; 3061; 3065; 3069; 3073; 3077; 3081; 3085; 3089; 3093; 3097; 3101; 3105; 3109; 3113; 3117; 3121; 3125; 3129; 3133; 3137; 3141; 3145; 3149; 3153; 3157; 3161; 3165; 3169; 3173; 3177; 3181; 3185; 3189; 3193; 3197; 3201; 3205; 3209; 3213; 3217; 3221; 3225; 3229; 3233; 3237; 3241; 3245; 3249; 3253; 3257; 3261; 3265; 3269; 3273; 3277; 3281; 3285; 3289; 3293; 3297; 3301; 3305; 3309; 3313; 3317; 3321; 3325; 3329; 3333; 3337; 3341; 3345; 3349; 3353; 3357; 3361; 3365; 3369; 3373; 3377; 3381; 3385; 3389; 3393; 3397; 3401; 3405; 3409; 3413; 3417; 3421; 3425; 3429; 3433; 3437; 3441; 3445; 3449; 3453; 3457; 3461; 3465; 3469; 3473; 3477; 3481; 3485; 3489; 3493; 3497; 3501; 3505; 3509; 3513; 3517; 3521; 3525; 3529; 3533; 3537; 3541; 3545; 3549; 3553; 3557; 3561; 3565; 3569; 3573; 3577; 3581; 3585; 3589; 3593; 3597; 3601; 3605; 3609; 3613; 3617; 3621; 3625; 3629; 3633; 3637; 3641; 3645; 3649; 3653; 3657; 3661; 3665; 3669; 3673; 3677; 3681; 3685; 3689; 3693; 3697; 3701; 3705; 3709; 3713; 3717; 3721; 3725; 3729; 3733; 3737; 3741; 3745; 3749; 3753; 3757; 3761; 3765; 3769; 3773; 3777; 3781; 3785; 3789; 3793; 3797; 3801; 3805; 3809; 3813; 3817; 3821; 3825; 3829; 3833; 3837; 3841; 3845; 3849; 3853; 3857; 3861; 3865; 3869; 3873; 3877; 3881; 3885; 3889; 3893; 3897; 3901;
```

RN 524961-40-8 HCAPLUS

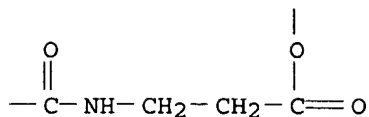
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoether with hydroxyacetyl-L-aspartoylbis[L-aspartoylbis[.beta.-alanine]] tetrakis[(1H-purin-6-ylthio)methyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

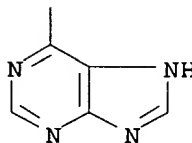




PAGE 2-B



PAGE 3-A

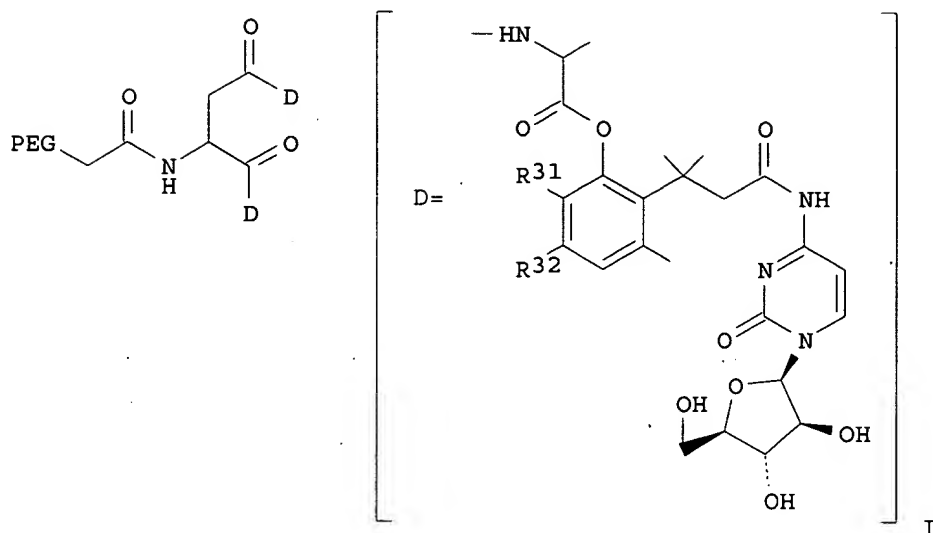


L18 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2002:657977 HCAPLUS  
 DOCUMENT NUMBER: 137:206540  
 TITLE: Terminally-branched **polymeric** linkers and  
 polymeric conjugates as  
 prodrugs  
 INVENTOR(S): Choe, Yun Hwang; Greenwald, Richard B.  
 PATENT ASSIGNEE(S): Enzon, Inc., USA  
 SOURCE: PCT Int. Appl., 57 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002066066	A1	20020829	WO 2002-US4780	20020219
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2002161052	A1	20021031	US 2002-78649	20020219
PRIORITY APPLN. INFO.:			US 2001-272511P	P 20010220
OTHER SOURCE(S):		MARPAT 137:206540		
GI				

*If mine  
is allowed  
becomes  
102(a)*





- AB Terminally-branched polymeric prodrug platforms capable of high degrees of loading are disclosed. In preferred aspects of the invention, the prodrug platform releases multiple parent compds. after each branch holding the active agent undergoes a benzyl elimination reaction. E.g., I was prepd. and antitumor activity was tested in mice.
- IC ICM A61K047-30  
ICS A61K039-385; A61K038-54
- CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 1, 33, 35
- ST **prodrug polymer link conjugate**; antitumor  
**prodrug PEG deriv**
- IT **Drug delivery systems**  
(**prodrugs**; terminally-branched **polymeric linkers**  
and **polymeric conjugates as prodrugs**)<sup>2</sup>
- IT Antitumor agents  
(terminally-branched **polymeric linkers** and **polymeric conjugates as prodrugs**)
- IT Polyoxyalkylenes, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(terminally-branched **polymeric linkers** and **polymeric conjugates as prodrugs**)
- IT 147-94-4, Ara-c 148-82-3, Melphalan 524-38-9, N-Hydroxyphthalimide  
13726-67-5, N-tert-Butoxycarbonylaspartic acid 25322-68-3, Peg  
452369-70-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(terminally-branched **polymeric linkers** and **polymeric conjugates as prodrugs**)
- IT 1791-13-5P, Aspartic acid di tert-butyl ester hydrochloride 14358-33-9P,  
Aspartic acid dimethyl ester hydrochloride 88457-23-2P 167082-77-1P  
187978-51-4P 188636-64-8P 229958-24-1P 229958-26-3P 229958-32-1P  
261364-51-6P 452347-51-2P 452347-65-8P 452347-68-1P 452347-80-7P  
452347-83-0P 452369-71-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(terminally-branched **polymeric linkers** and **polymeric conjugates as prodrugs**)
- IT 452347-72-7 452347-75-0

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(terminally-branched polymeric linkers and polymeric conjugates as prodrugs)

IT 452369-72-1P 452943-24-7P 452952-59-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(terminally-branched polymeric linkers and polymeric conjugates as prodrugs)

IT 452951-19-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(terminally-branched polymeric linkers and polymeric conjugates as prodrugs)

IT 452943-24-7P 452952-59-9P

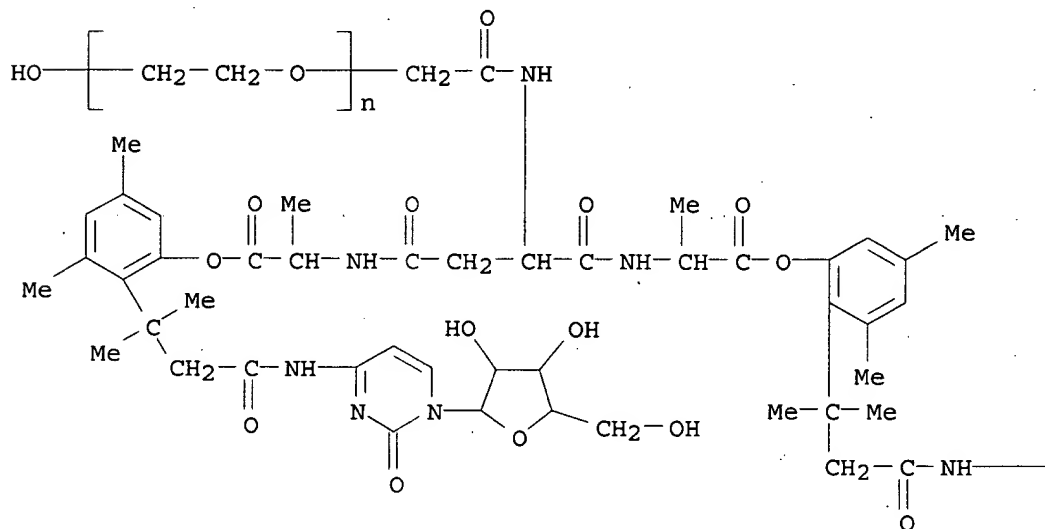
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

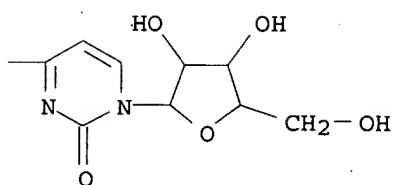
(terminally-branched polymeric linkers and polymeric conjugates as prodrugs)

RN 452943-24-7 HCAPLUS

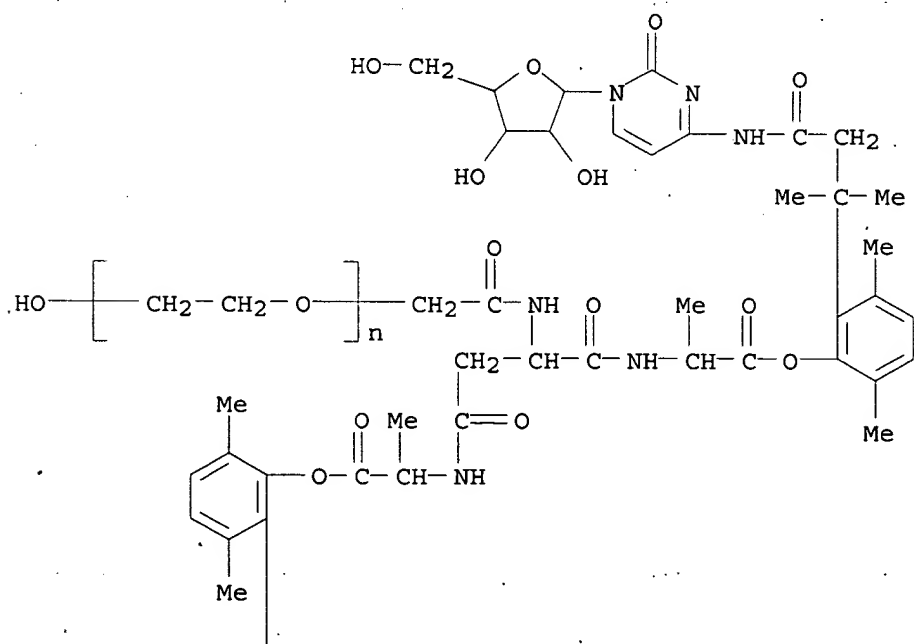
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-alanine] bis[2-[3-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-1,1-dimethyl-3-oxopropyl]-3,5-dimethylphenyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

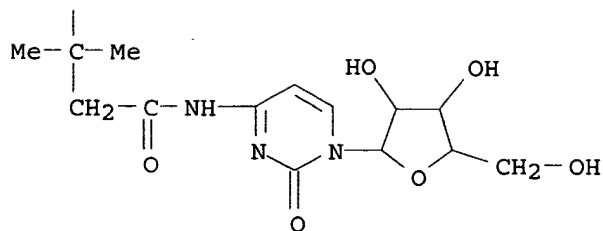




RN 452952-59-9 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-monoether with  
 N-(hydroxyacetyl)-L-aspartoylbis[L-alanine] bis[2-[3-[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-1,1-dimethyl-3-  
 oxopropyl]-3,6-dimethylphenyl] ester (9CI) (CA INDEX NAME)



PAGE 2-A



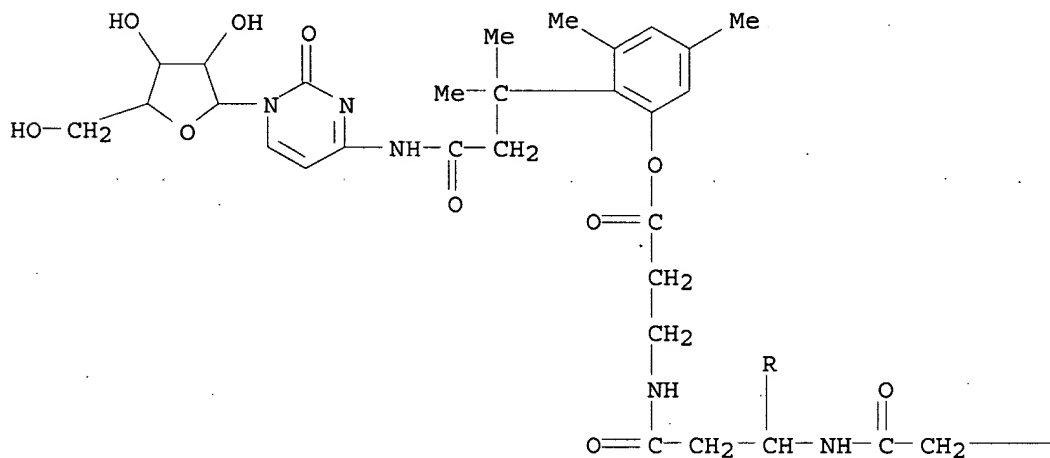
IT 452951-19-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (terminally-branched polymeric linkers and polymeric  
 conjugates as prodrugs)

RN 452951-19-8 HCAPLUS

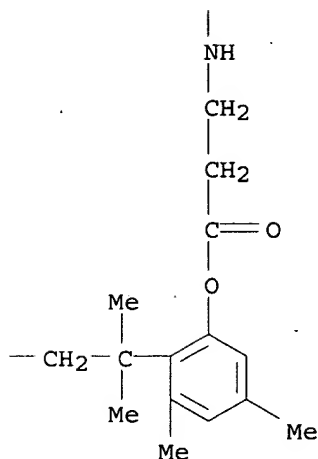
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ester with  
 N-carboxy-L-aspartoylbis[L-aspartoylbis[.beta.-alanine]]  
 3,3',3'',3'''-tetrakis[2-[3-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-  
 oxo-4-pyrimidinyl)amino]-1,1-dimethyl-3-oxopropyl]-3,5-dimethylphenyl]  
 ester (1:1) (9CI) (CA INDEX NAME)

PAGE 1-A

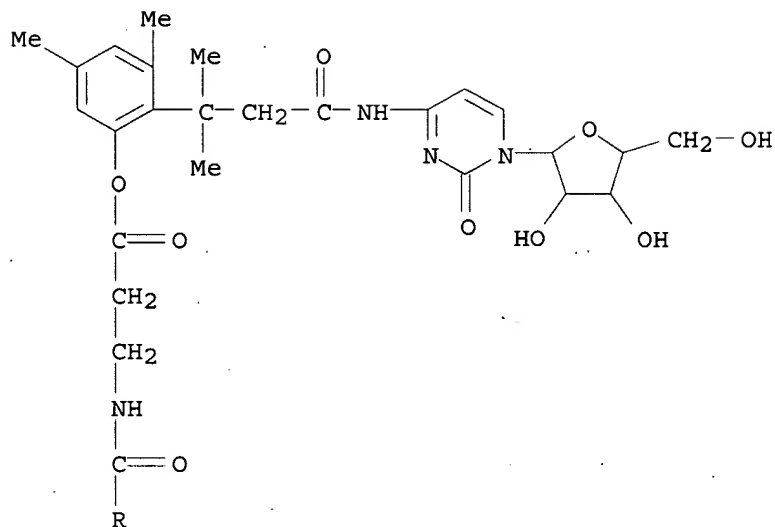




PAGE 2-B



PAGE 3-A



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:657915 HCAPLUS

DOCUMENT NUMBER: 137:206534

TITLE: Terminally-branched polymeric linkers and polymeric conjugates as prodrugs

INVENTOR(S): Choe, Yun Hwang; Greenwald, Richard B.

PATENT ASSIGNEE(S): Enzon, Inc., USA

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002065988	A2	20020829	WO 2002-US4781	20020219
WO 2002065988	A3	20030410		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002183259	A1	20021205	US 2002-78730	20020219
PRIORITY APPLN. INFO.:		US 2001-270009P P 20010220		
OTHER SOURCE(S):		MARPAT 137:206534		

AB Terminally-branched polymeric prodrug platforms capable of high degrees of loading are disclosed. In preferred aspects of the invention, the prodrug platform releases multiple parent compds. after each branch holding the active agent undergoes a benzyl elimination reaction. Methods of prepg. the prodrugs and using the same in the treatment of mammals are also disclosed. For example, a polyethylene glycol-cytosine arabinoside (PEG-Ara-C) conjugate was prepd. The PEG-Ara-C conjugate demonstrated in tumor-bearing mice about equiv. antitumor activity with native Ara-C at only 20% of the active parent compd.'s dose. The IC50 for the PEG-Ara-C conjugate and the native Ara-C was 448 and 10 nM, resp., as detd. in vitro using the P388/O (murine lymphoid neoplasm) cell line.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 35

ST **polymer conjugate** prepn **prodrug** antitumor;  
 polyethylene glycol **conjugate** prepn **prodrug** antitumor

IT **Polymers**, biological studies

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**conjugates**; prepn. of terminally-branched **polymeric** linkers and **polymeric conjugates** as **prodrugs**)

IT Antitumor agents

(prepn. of terminally-branched **polymeric** linkers and **polymeric conjugates** as antitumor **prodrugs**)

IT Polyoxyalkylenes, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of terminally-branched **polymeric** linkers and **polymeric conjugates** as **prodrugs**)

IT Drug delivery systems

(**prodrugs**; prepn. of terminally-branched **polymeric** linkers and **polymeric conjugates** as **prodrugs**)

IT 452369-72-1P 452369-80-1P 452369-87-8P 452369-91-4P  
 452369-98-1P

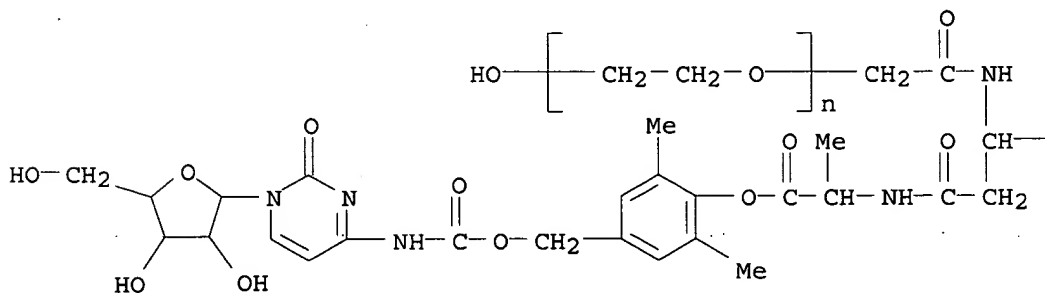
RL: AMX (Analytical matrix); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of terminally-branched **polymeric** linkers and **polymeric conjugates** as **prodrugs**)

*nine words  
be  
(102(a))*

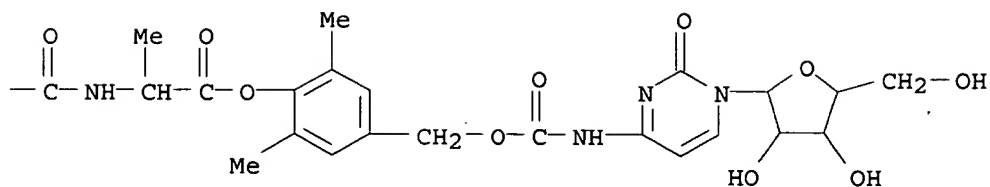
- IT 147-94-4, Ara-C 148-82-3, Melphalan  
 RL: ANT (Analyte); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent)  
 (prepn. of terminally-branched polymeric linkers and polymeric conjugates as prodrugs)
- IT 524-38-9, N-Hydroxyphthalimide 623-05-2, 4-Hydroxymethyl phenol 1791-13-5, Aspartic acid di-tert-butyl ester hydrochloride 4397-14-2, 4-Hydroxy-3,5-dimethylbenzyl alcohol 15761-38-3 25322-68-3 153086-78-3 261364-63-0 452369-70-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of terminally-branched polymeric linkers and polymeric conjugates as prodrugs)
- IT 88457-23-2P 126070-20-0P 452347-51-2P 452369-71-0P 452369-73-2P 452369-74-3P 452369-75-4P 452369-76-5P 452369-77-6P 452369-79-8P 452369-81-2P 452369-82-3P 452369-83-4P 452369-84-5P 452369-86-7P 452369-88-9P 452369-90-3P 452369-92-5P 452369-93-6P 452369-94-7P 452369-95-8P 452369-97-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of terminally-branched polymeric linkers and polymeric conjugates as prodrugs)
- IT 147-94-4DP, Ara-C, polymer conjugates 148-82-3DP, Melphalan, polymer conjugates 553-27-5DP, polymer conjugates 20830-81-3DP, Daunorubicin, polymer conjugates 23214-92-8DP, Doxorubicin, polymer conjugates 95058-81-4DP, Gemcitabine, polymer conjugates 111858-35-6DP, polymer conjugates  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of terminally-branched polymeric linkers and polymeric conjugates as prodrugs)
- IT 452369-80-1P 452369-87-8P  
 RL: AMX (Analytical matrix); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of terminally-branched polymeric linkers and polymeric conjugates as prodrugs)
- RN 452369-80-1 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, 1-monoether with N-(hydroxyacetyl)-L-aspartoylbis[L-alanine] bis[4-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]methyl]-2,6-dimethylphenyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A





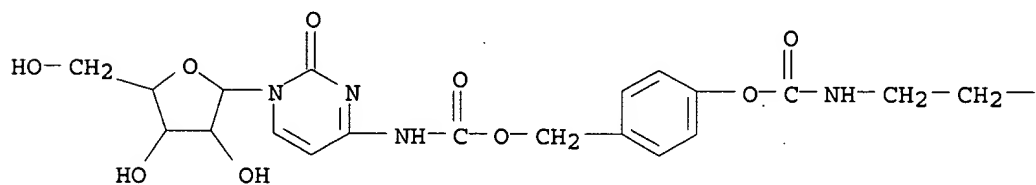
PAGE 1-B



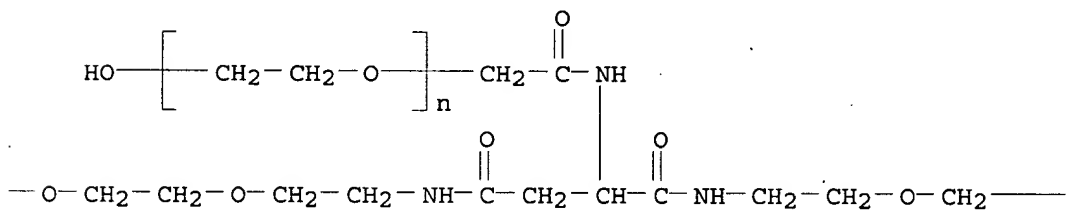
RN 452369-87-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-17-[4-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]methyl]phenoxy]-4-[12-[4-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]methyl]phenoxy]-1,12-dioxo-5,8-dioxo-2,11-diazadodec-1-yl]-2,6,17-trioxo-10,13-dioxo-3,7,16-triazaheptadec-1-yl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)

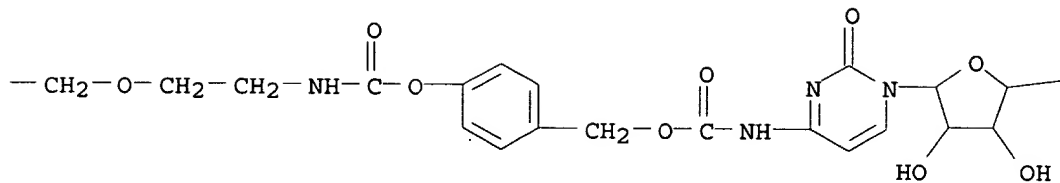
PAGE 1-A



PAGE 1-B



PAGE 1-C



PAGE 1-D

-CH<sub>2</sub>-OH

L18 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:616193 HCAPLUS

DOCUMENT NUMBER: 137:174933

TITLE: Modulated-release polymeric silicate particles for aerosol delivery

INVENTOR(S): Zhu, Yaping; Stefanos, Simon; Adjei, Akwete L.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 11 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002110528	A1	20020815	US 2001-784673	20010215
US 6544497	B2	20030408		
WO 2002066011	A1	20020829	WO 2002-US4286	20020213

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-784673 A 20010215

AB A modulated release aerosol formulation comprises a polymer, e.g. silica gel or fumed silica gel, having a selected medicament assocd. there with, a fluid carrier for carrying and delivering the construct and a stabilizer. The polymer is present in an amt. of about 0.000001-10%. A

medicament comprises a protein or peptide with a mol. size of about 1-150 kD, such as insulin, amylin, an interleukin, an interferon, heparin, a thrombolytic, an antitrypsin, a hormone, a growth factor, an enzyme, etc. A stabilizer is selected from dipeptides and tripeptides. A method of treating in a human or an animal a condition capable of treatment by dermal, sublingual, buccal, oral, or nasal application comprises administering an aerosol formulation in a canister equipped with a metered dose valve.

- IC ICM A61L009-04
- ICS A61K009-14
- NCL 424046000
- CC 63-6 (Pharmaceuticals)
- ST **polymer** silicate particle aerosol **slow drug release**; protein peptide aerosol **polymer** silicate particle; dipeptide tripeptide stabilizer **polymer** silicate particle
- IT **Drug delivery** systems  
(aerosols, inhalants; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT **Drug delivery** systems  
(aerosols; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT **Drug delivery** systems  
(buccal; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT **Drug delivery** systems  
(carriers, fluid; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT Hydrocarbons, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(chlorofluorocarbons, fluid carriers; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT Air  
(compressed, fluid carrier; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT Hydrocarbons, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fluid carriers; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT Anti-infective agents  
Antibiotics  
Antidiabetic agents  
Human  
Propellants (sprays and foams)  
Skin preparations (pharmaceutical)  
Stabilizing agents  
Thrombolytics  
Vaccines  
(modulated-release **polymeric** silicate particles for aerosol delivery)
- IT Bentonite, biological studies  
Bone morphogenetic proteins  
Cytokines  
Enzymes, biological studies  
Growth factors, animal  
Hemopoietins  
Hormones, animal, biological studies  
Immunoglobulins  
Interferons  
Interleukins

Kaolin, biological studies  
 Mica-group minerals, biological studies  
 Nucleic acids  
 Oligonucleotides  
 Pumice  
 Silanes  
 Silica gel, biological studies  
 Siloxanes (nonpolymeric)  
 Tumor necrosis factors  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (modulated-release **polymeric** silicate particles for aerosol delivery)

IT Peptides, biological studies  
 Proteins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (modulated-release **polymeric** silicate particles for aerosol delivery of protein and peptide drugs)

IT Lung  
 (modulated-release **polymeric** silicate particles for aerosol lung delivery)

IT Antibodies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (monoclonal; modulated-release **polymeric** silicate particles for aerosol delivery)

IT Drug delivery systems  
 (nasal; modulated-release **polymeric** silicate particles for aerosol delivery)

IT Drug delivery systems  
 (oral; modulated-release **polymeric** silicate particles for aerosol delivery)

IT Drug delivery systems  
 (particles; modulated-release **polymeric** silicate particles for aerosol delivery)

IT Silicates, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (poly-; modulated-release **polymeric** silicate particles for aerosol delivery)

IT Drug delivery systems  
 (slow-release; modulated-release **polymeric** silicate particles for aerosol delivery)

IT Dipeptides  
 Tripeptides  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (stabilizers; modulated-release **polymeric** silicate particles for aerosol delivery)

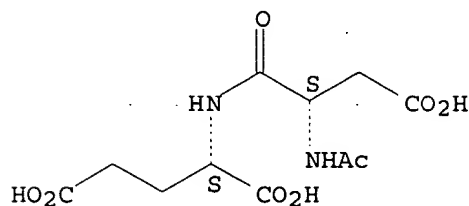
IT 64-17-5, Ethanol, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (cosolvent; modulated-release **polymeric** silicate particles for aerosol delivery)

IT 74-98-6, n-Propane, biological studies 106-97-8, n-Butane, biological studies 124-38-9, Carbon dioxide, biological studies 431-89-0, 1,1,1,2,3,3,3-Heptafluoropropane 811-97-2, 1,1,1,2-Tetrafluoroethane 7727-37-9, Nitrogen, biological studies 26760-64-5, Isopentene  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fluid carrier; modulated-release **polymeric** silicate particles for aerosol delivery)

IT 9001-92-7, Protease  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors; modulated-release **polymeric** silicate particles for aerosol delivery)

- IT 9004-10-8, Insulin, biological studies  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (modulated-release **polymeric** silicate particles for aerosol delivery)
- IT 50-60-2, Phentolamine 58-82-2, Bradykinin 64-77-7, Tolbutamide 75-69-4, Propellant 11 75-71-8 76-14-2, Propellant 114 94-20-2, Chlorpropamide 556-50-3, Glycylglycine 636-58-8, .gamma.-L-Glutamyl-L-cysteine 968-81-0, Acetohexamide 1050-28-8, L-Tyrosyl-L-tyrosine 1066-17-7, Colistin 1115-70-4, Glucophage 1156-19-0, Tolazamide 1318-93-0, Montmorillonite, biological studies 1343-98-2, Silicic acid 1344-28-1, Aluminum oxide, biological studies 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1406-11-7, Polymyxin 3061-88-9, L-Alanyl-L-tyrosine 3106-85-2 7412-78-4 7412-78-4D, **conjugates** 7631-86-9, Silicon dioxide, biological studies 7699-41-4, Metasilicic acid 8011-61-8, Tyrocidine 9002-64-6, Parathyroid hormone 9003-98-9, DNase 9004-10-8D, Insulin, analogs 9005-49-6, Heparin, biological studies 9007-12-9, Calcitonin 9007-92-5, Glucagon, biological studies 9015-94-5, Renin, biological studies 9025-39-2, Heparinase 9034-39-3, Growth hormone-releasing hormone 9034-40-6, LH-RH 9035-81-8, Antitrypsin 9061-61-4, Nerve growth factor 10193-36-9, Orthosilicic acid 10238-21-8, Glyburide 11096-26-7, Erythropoietin 12174-11-7, Attapulgit 13433-09-5, L-Aspartyl-L-phenylalanine 14807-96-6, Talc, biological studies 20638-18-0, Disilicic acid 24305-27-9, TRH 29094-61-9, Glipizide 31324-97-7 32461-59-9, N-Acetyl-L-cysteinyl-glycine 36791-04-5, Ribavirin 51110-01-1, Somatostatin 53678-77-6, Muramyl dipeptide 53714-56-0, Leuprolide 57956-13-5, Trisilicic acid 65807-02-5, Goserelin 70904-56-2, L-Tyrosyl-L-arginine 72636-02-3 72636-02-3D, **conjugates** 74863-12-0, L-Arginyl-L-tyrosine 76932-56-4, Nafarelin 79217-60-0, Cyclosporin 81627-83-0, Macrophage-colony stimulating factor 83150-76-9, Octreotide 85637-73-6, ANP 89750-14-1, Glucagon-like peptide I 106602-62-4, Amylin 124389-07-7, Muramyl tripeptide 143011-72-7, G-CSF 391929-04-7, Deltirex 391929-05-8, G-SF 446045-27-8  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (modulated-release **polymeric** silicate particles for aerosol delivery)
- IT 19246-18-5, L-Cysteinylglycine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (stabilizer; modulated-release **polymeric** silicate particles for aerosol delivery)
- IT 3106-85-2  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (modulated-release **polymeric** silicate particles for aerosol delivery)
- RN 3106-85-2 HCAPLUS  
 CN L-Glutamic acid, N-acetyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2002:385000 HCAPLUS  
 DOCUMENT NUMBER: 136:380138  
 TITLE: Compounds and methods for modulating junctional  
 adhesion molecule-mediated functions  
 INVENTOR(S): Blaschuk, Orest W.; Symonds, James Matthew; Gour,  
 Barbara J.  
 PATENT ASSIGNEE(S): Adherex Technologies, Inc., Can.  
 SOURCE: U.S., 26 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6391855	B1	20020521	US 1999-324541	19990602
US 2003027761	A1	20030206	US 2002-119537	20020408

PRIORITY APPLN. INFO.: US 1999-324541 A3 19990602

AB Methods are provided for using modulating agents to enhance or inhibit junctional adhesion mol. (JAM)-mediated cell adhesion in a variety of in vivo and in vitro contexts. The modulating agents comprise at least one JAM cell adhesion recognition sequence or an antibody or fragment thereof that specifically binds the JAM cell adhesion recognition sequence. Modulating agents may addnl. comprise one or more cell adhesion recognition sequences recognized by other adhesion mols. Such modulating agents may, but need not, be linked to a targeting agent, drug and/or support material.

IC ICM A61K038-04  
 ICS A61K038-17; C07K007-04; C07K017-00

NCL 514017000

CC 1-12 (Pharmacology)

IT Adhesion, biological

Drug delivery systems

(compds. and methods for modulating junctional adhesion mol.-mediated functions)

IT Bioreactors

Membranes, nonbiological

Microparticles

Ultrathin films

(conjugates with cell adhesion-modulating agents; compds. and methods for modulating junctional adhesion mol.-mediated functions)

IT Drugs

(conjugates, and detectable marker conjugates, with cell adhesion-modulating agents; compds. and methods for modulating junctional adhesion mol.-mediated functions)

IT Polymers, biological studies

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(conjugates, with cell adhesion-modulating agents; compds. and methods for modulating junctional adhesion mol.-mediated functions)

IT Medical goods

(plastic dishes, conjugates with cell adhesion-modulating agents; compds. and methods for modulating junctional adhesion mol.-mediated functions)

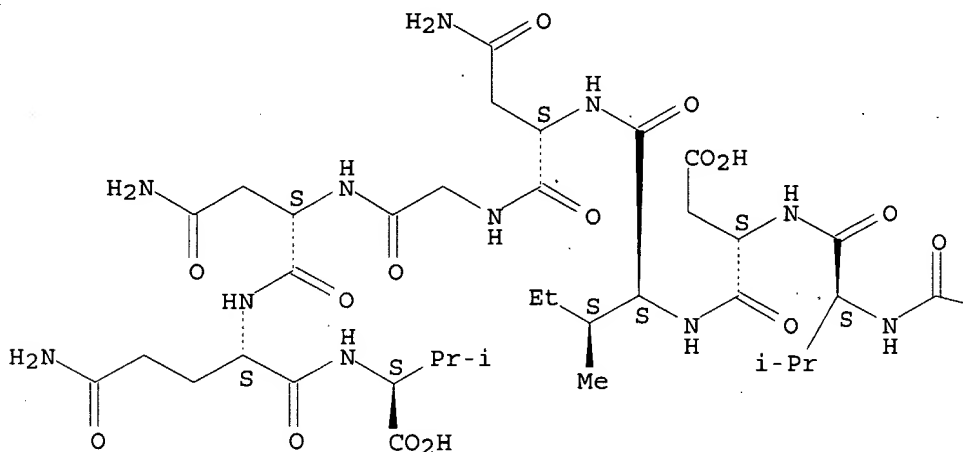
IT Pipes and Tubes

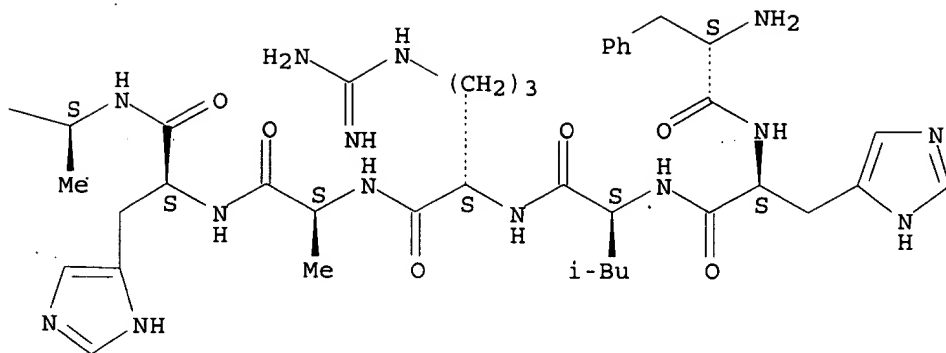
(plastic tubes, conjugates with cell adhesion-modulating agents; compds. and methods for modulating junctional adhesion

- mol.-mediated functions)
- IT **Drug delivery systems**  
(**sustained-release**; compds. and methods for  
modulating junctional adhesion mol.-mediated functions)
- IT **Medical goods**  
(sutures, **conjugates** with cell adhesion-modulating agents;  
compds. and methods for modulating junctional adhesion mol.-mediated  
functions)
- IT **Drug delivery systems**  
(targeting agent **conjugates** with cell adhesion-modulating  
agents; compds. and methods for modulating junctional adhesion  
mol.-mediated functions)
- IT 73205-86-4 143304-79-4 175294-45-8 222169-83-7 **222169-86-0**  
231282-25-0 231282-43-2 249636-29-1 250741-68-5 267423-25-6  
427885-44-7 427885-45-8  
RL: PRP (Properties)  
(unclaimed sequence; compds. and methods for modulating junctional  
adhesion mol.-mediated functions)
- IT **222169-86-0**  
RL: PRP (Properties)  
(unclaimed sequence; compds. and methods for modulating junctional  
adhesion mol.-mediated functions)
- RN 222169-86-0 HCAPLUS
- CN L-Valine, L-phenylalanyl-L-histidyl-L-leucyl-L-arginyl-L-alanyl-L-histidyl-  
L-alanyl-L-valyl-L-.alpha.-aspartyl-L-isoleucyl-L-asparaginylglycyl-L-  
asparaginyl-L-glutaminy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2002:107826 HCAPLUS  
 DOCUMENT NUMBER: 136:172758  
 TITLE: Terminally-branched **polymeric** linkers containing extension moieties for **prodrug conjugates**  
 INVENTOR(S): Greenwald, Richard B.; Choe, Yun H.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 32 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002015691	A1	20020207	US 2001-823296	20010329
PRIORITY APPLN. INFO.: US 2000-193931P			P	20000331

AB The present invention relates to polymer-based (e.g., PEG) conjugates having increased therapeutic **payloads**. In particular, the invention relates to the use of extension moieties which increase the efficiency of the loading of drugs onto the polymeric carriers. A variety of prodrugs were prepd. from ara-C and PEG derivs. by using spacer groups. The prodrug demonstrated better antitumor activity than ara-C alone. The prodrug produced complete tumor regression.

IC ICM A61K031-785  
 ICS C08G073-00

NCL 424078360

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 37

ST **polymer linker prodrug conjugate** prepn; araC  
**PEG linker prodrug** antitumor prepn

*marked  
earlier  
claims  
priority  
at same  
provisional  
8/15/03  
THIS IS MY  
APPLICATION!!*



- IT Drug delivery systems  
(polymer-bound; terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT Drug delivery systems  
(prodrugs; terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT Antitumor agents  
Molecular weight distribution  
(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT 396133-96-3P 396133-97-4P 396133-98-5P  
396133-99-6P 396134-00-2P 396134-01-3P  
396134-02-4P 396134-06-8P 396134-07-9P  
396134-08-0P 396134-09-1P 396134-10-4P  
396134-11-5P 396134-12-6P 396134-15-9P  
396134-16-0P 396134-17-1P 396134-18-2P  
396134-19-3P 396134-20-6P 396134-21-7P  
397244-13-2P 397244-15-4P 397244-37-0P 397244-38-1P 397244-39-2P  
397244-40-5P 397245-64-6P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT 56-84-8D, L-Aspartic acid, PEG deriv. 96-53-7, 2-Thiazolidinethione  
105-36-2 147-94-4, Ara-C 524-38-9, N-Hydroxyphthalimide 929-06-6  
7689-03-4, Camptothecin 9004-74-4 13139-15-6 13726-67-5  
19172-47-5, Lawesson's reagent 32315-10-9, Triphosgene 74124-79-1,  
N,N'-Disuccinimidyl carbonate 136586-99-7 153086-78-3 187848-53-9  
396134-05-7 396712-38-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT 80681-05-6P 96989-50-3P 108466-89-3P 139115-91-6P 167082-77-1P  
188636-64-8P 259802-47-6P 261364-63-0P 341551-69-7P 379711-88-3P  
379711-89-4P 396133-72-5P 396133-74-7P 396133-75-8P 396133-77-0P  
396133-78-1P 396133-79-2P 396133-81-6P 396133-82-7P 396133-83-8P  
396133-85-0P 396133-86-1P 396133-88-3P 396133-89-4P 396133-90-7P  
396133-92-9P 396133-93-0P 396133-95-2P 396134-04-6P  
396134-13-7P 396134-14-8P 396134-22-8P  
396134-24-0P 396134-25-1P 396134-28-4P 396134-30-8P  
396134-31-9P 397245-65-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT 367928-61-8P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)
- IT 396133-96-3P 396133-97-4P 396133-99-6P  
396134-00-2P 396134-01-3P 396134-02-4P  
396134-06-8P 396134-07-9P 396134-08-0P  
396134-09-1P 396134-10-4P 396134-11-5P  
396134-12-6P 396134-15-9P 396134-16-0P  
396134-17-1P 396134-18-2P 396134-19-3P  
396134-20-6P 396134-21-7P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

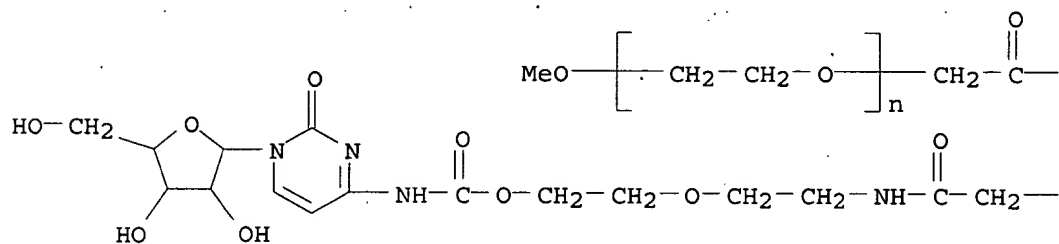
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)

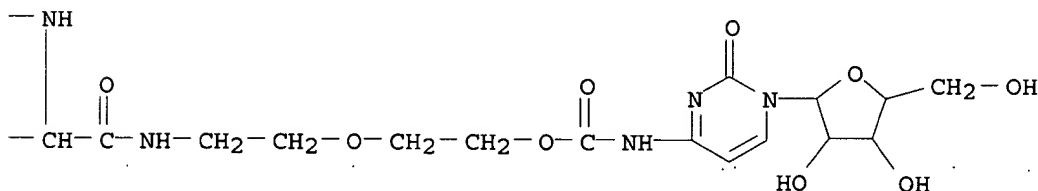
RN 396133-96-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-14-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[[2-[2-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]ethoxy]ethyl]amino]carbonyl]-2,6,14-trioxo-10,13-dioxo-3,7-diazatetradec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



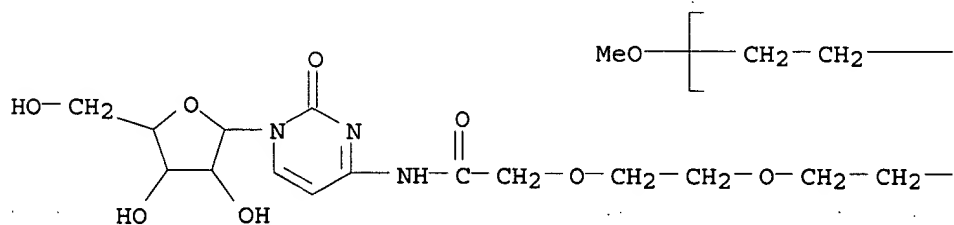
PAGE 1-B



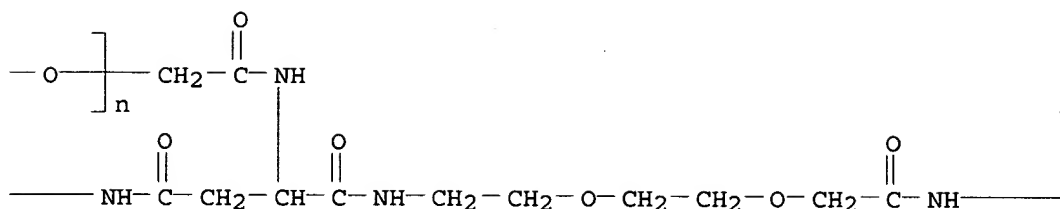
RN 396133-97-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-oxoethoxy]ethoxy]ethyl]amino]carbonyl]-2,6,15-trioxo-10,13-dioxo-3,7-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

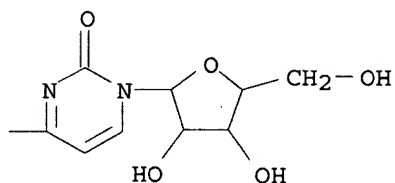
PAGE 1-A



PAGE 1-B



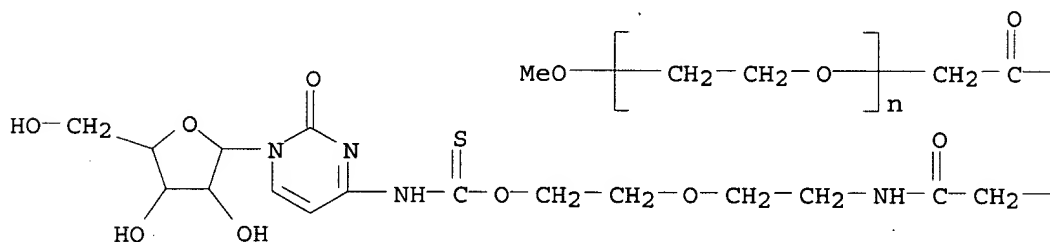
PAGE 1-C



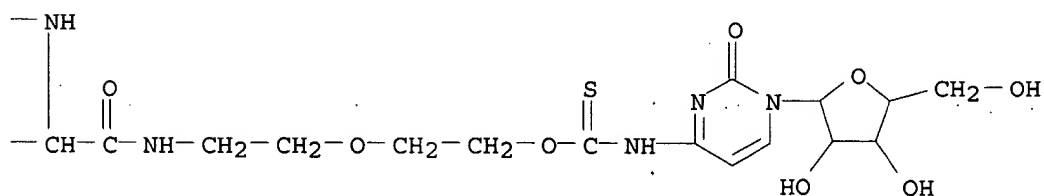
RN 396133-99-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-14-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethoxy]ethoxy]ethyl]amino]carbonyl]-2,6-dioxo-14-thioxo-10,13-dioxo-3,7-diazatetradec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



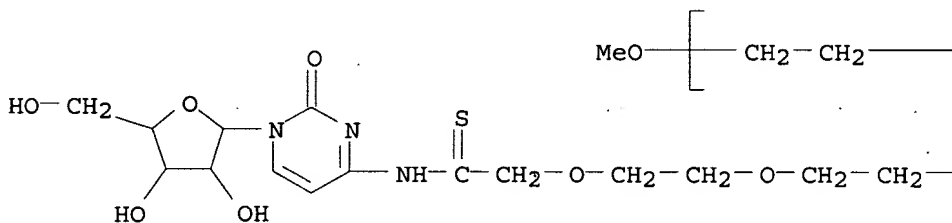
PAGE 1-B



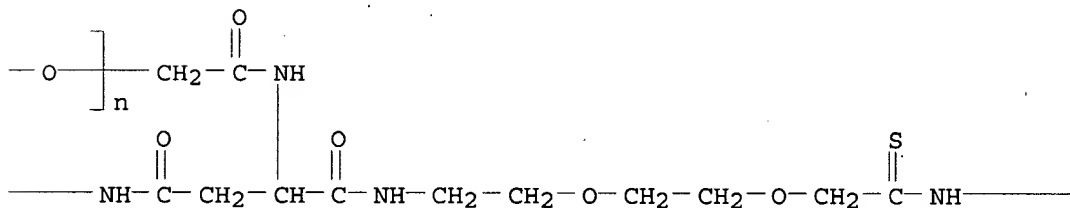
RN 396134-00-2 HCAPLUS

CN	<p>Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4-[[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-thioxoethoxy]ethoxy]ethyl]amino]carbonyl]-2,6-dioxo-15-thioxo-10,13-dioxo-3,7-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)</p>
----	--

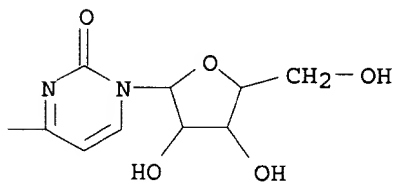
PAGE 1-A



PAGE 1-B



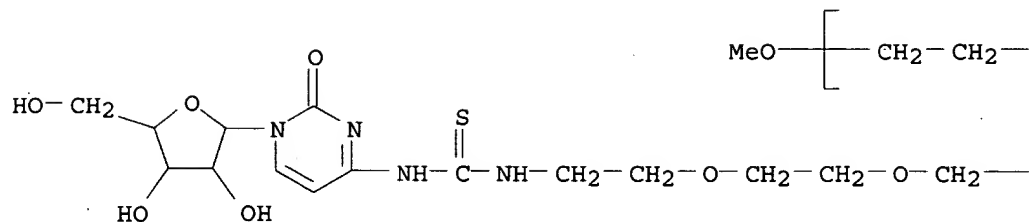
PAGE 1-C



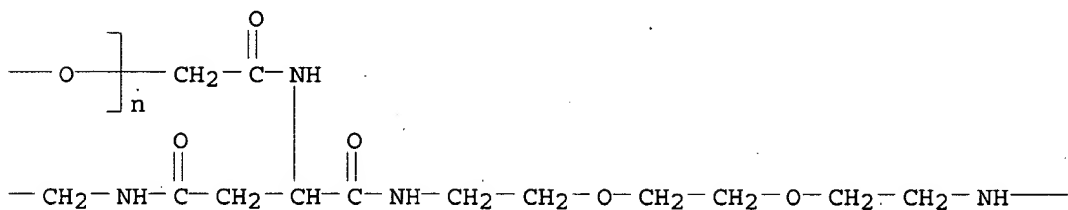
RN 396134-01-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-17-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-piperidiny]amino]-4-[12-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-1-oxo-12-thioxo-5,8-dioxo-2,11-diazadodec-1-yl]-2,6-dioxo-17-thioxo-10,13-dioxo-3,7,16-triazaheptadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

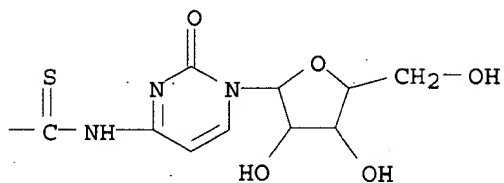
PAGE 1-A



PAGE 1-B



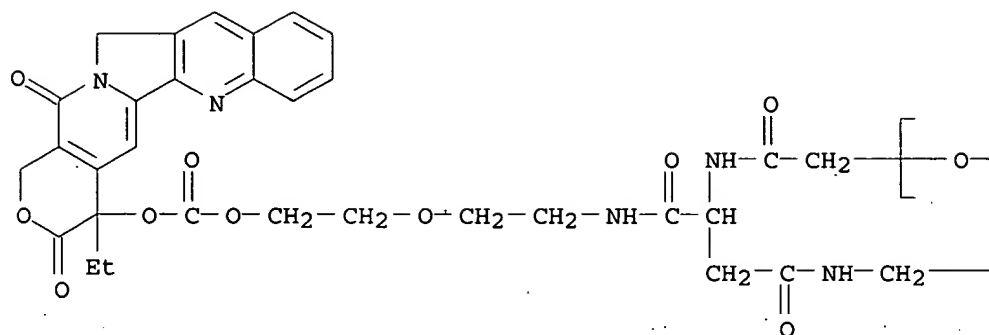
PAGE 1-C



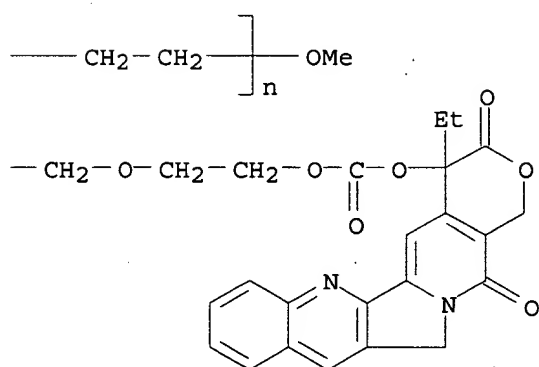
RN 396134-02-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[(4S)-14-[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-4-[[[2-[2-[[[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]oxy]ethoxy]ethyl]amino]carbonyl]-2,6,14-trioxo-10,13-dioxo-3,7-diazatetradec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



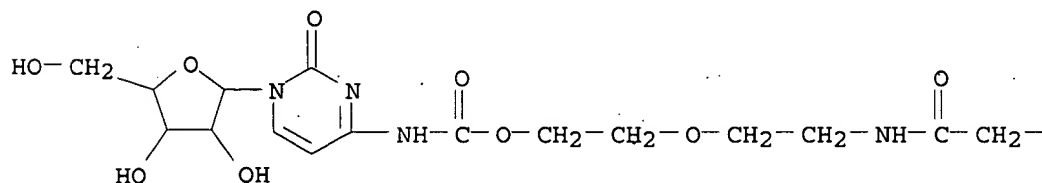
PAGE 1-B



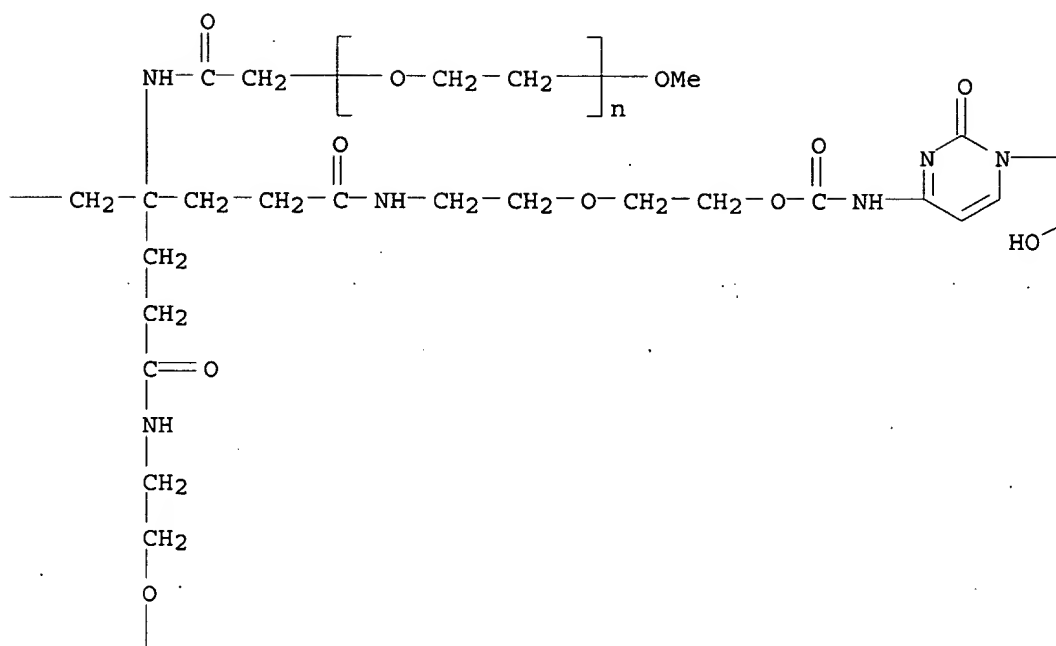
RN 396134-06-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[3-[[2-[2-[[[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7,15-trioxo-11,14-dioxo-3,8-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

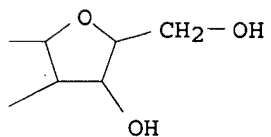
PAGE 1-A



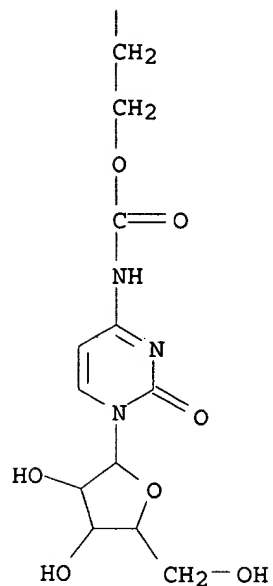
PAGE 1-B



PAGE 1-C



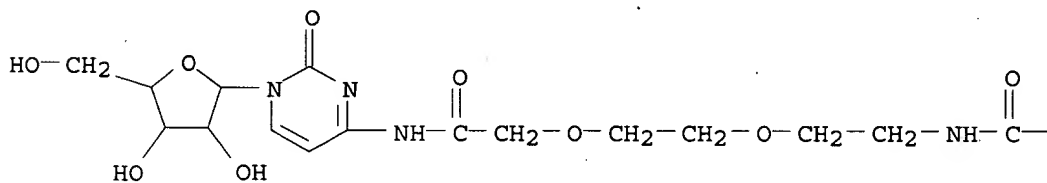
PAGE 2-B



RN 396134-07-9 HCAPLUS

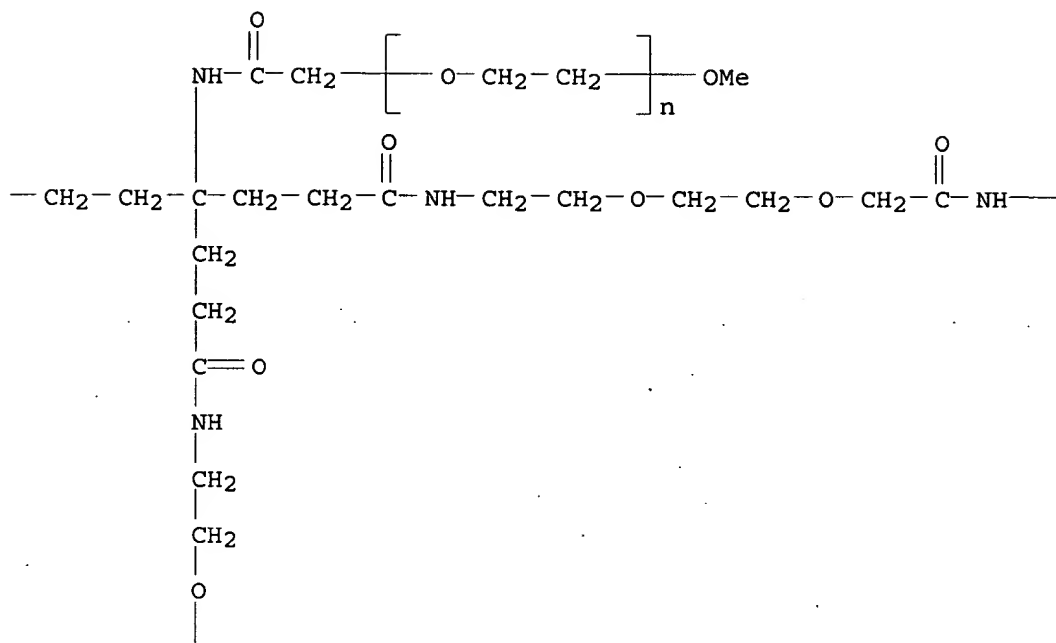
CN Poly(oxy-1,2-ethanediyl), .alpha.-[16-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[3-[[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-oxoethoxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7,16-trioxo-11,14-dioxo-3,8-diazahexadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

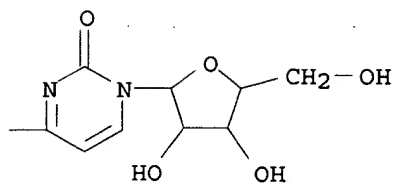




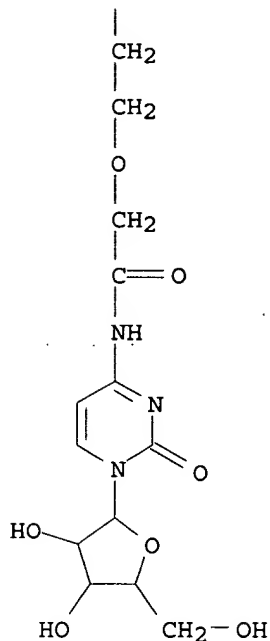
PAGE 1-B



PAGE 1-C

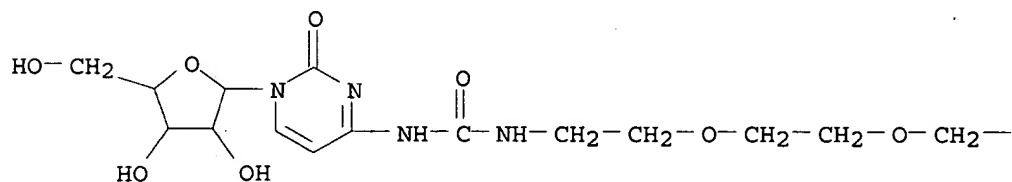


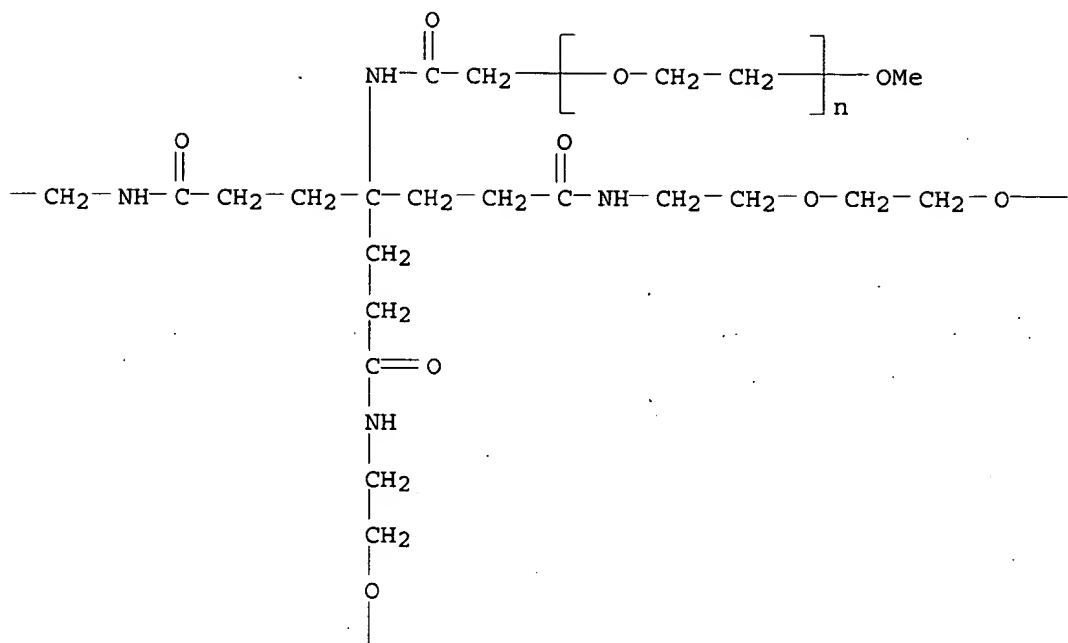
PAGE 2-B



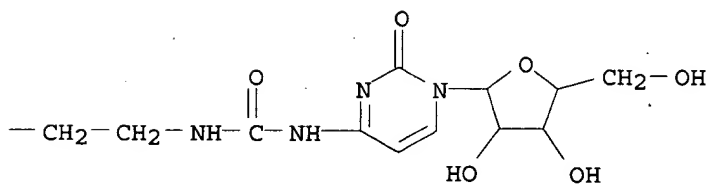
RN 396134-08-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-[18-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[14-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-3,14-dioxo-7,10-dioxo-4,13-diazatetradec-1-yl]-2,7,18-trioxo-11,14-dioxo-3,8,17-triazaoctadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

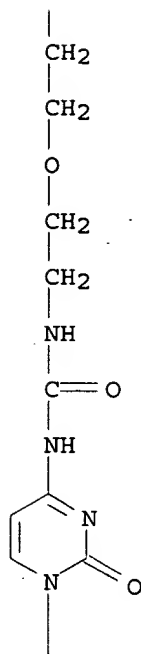




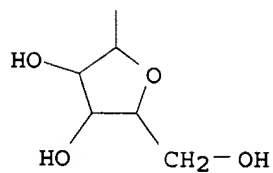
PAGE 1-C



PAGE 2-B

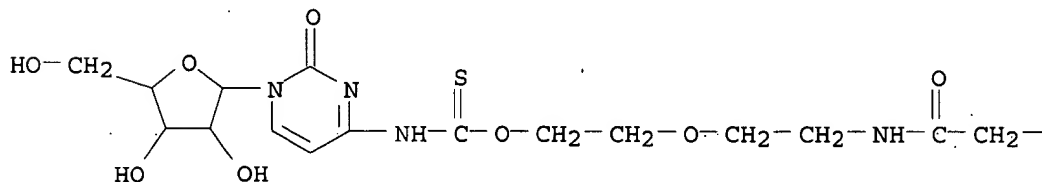


PAGE 3-B

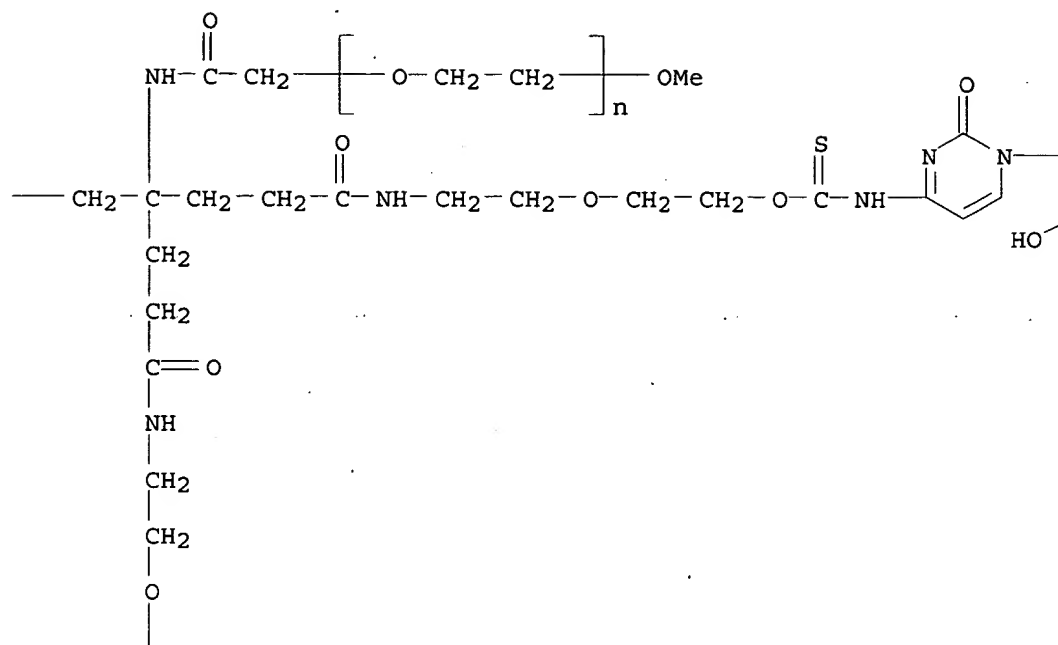


RN 396134-09-1 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-[15-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl) amino]-4,4-bis[3-[[2-[2-[[[1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl) amino]thioxomethoxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7-dioxo-15-thioxo-11,14-dioxo-3,8-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

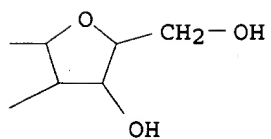
PAGE 1-A



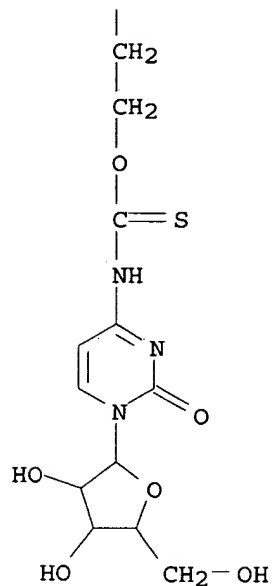
PAGE 1-B



PAGE 1-C



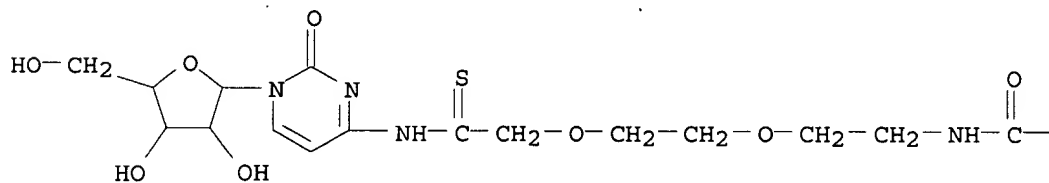
PAGE 2-B



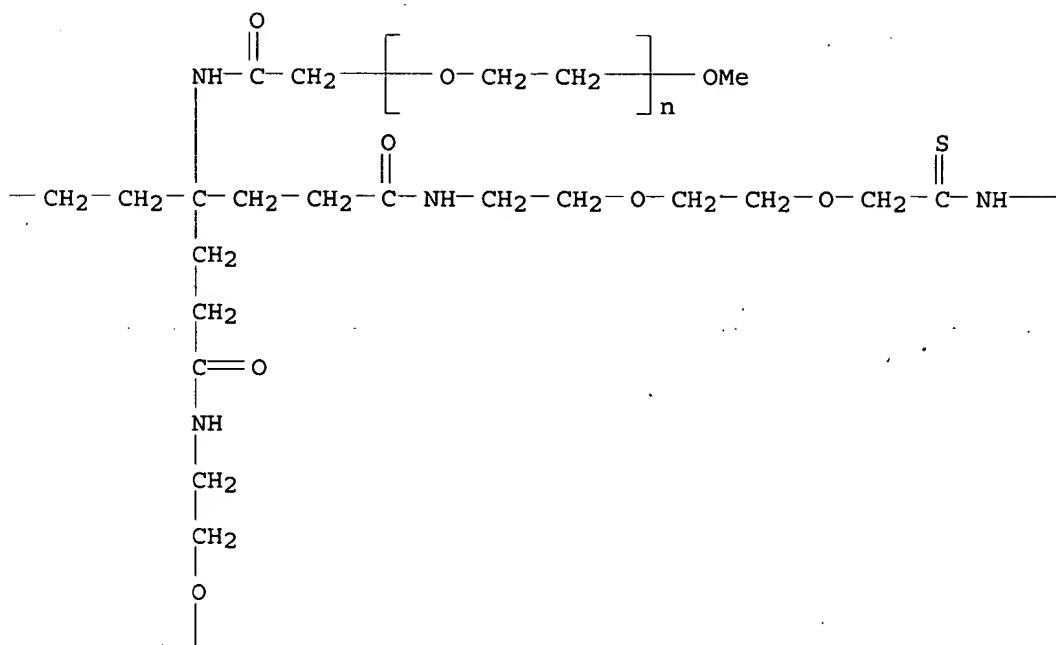
RN 396134-10-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[16-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[3-[[2-[2-[2-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-thioxoethoxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7-dioxo-16-thioxo-11,14-dioxo-3,8-diazahexadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

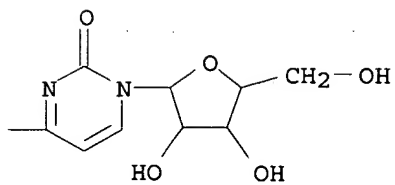
PAGE 1-A



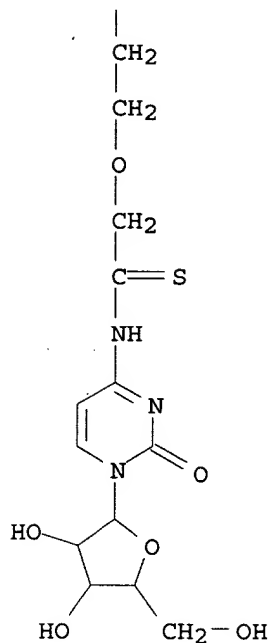
PAGE 1-B



PAGE 1-C



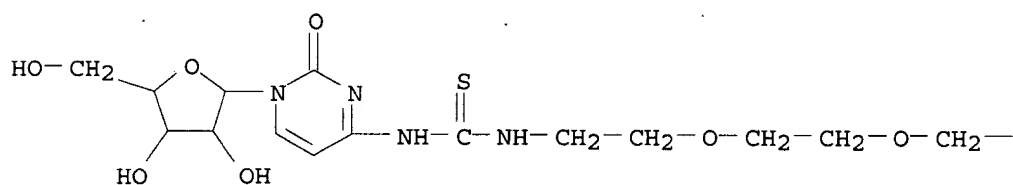
PAGE 2-B



RN 396134-11-5 HCAPLUS

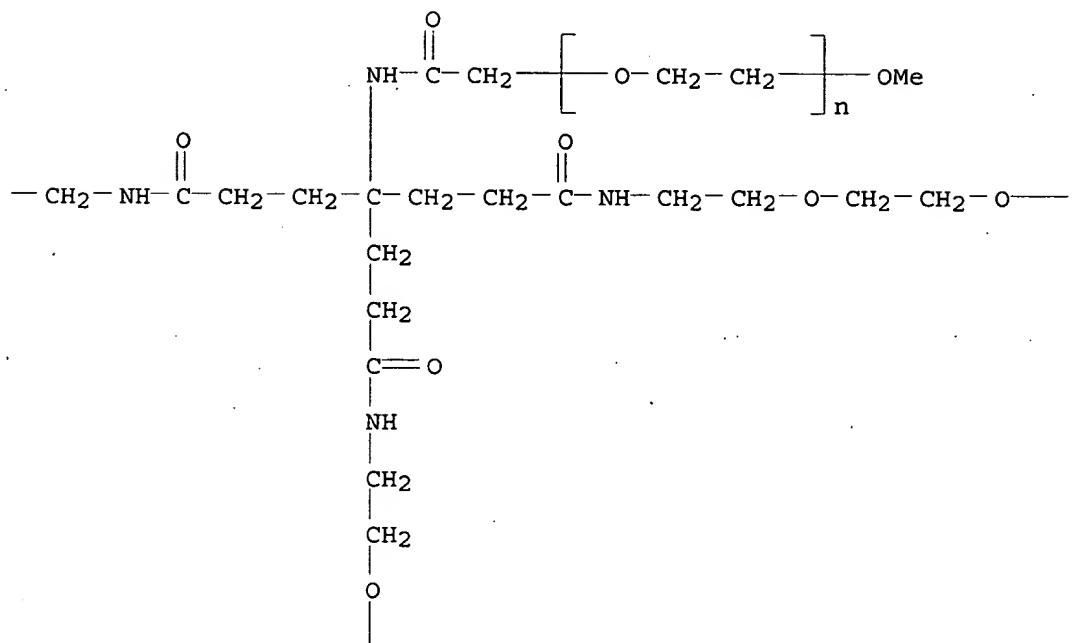
CN Poly(oxy-1,2-ethanediyl), .alpha.-[18-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-4,4-bis[14-[(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-3-oxo-14-thioxo-7,10-dioxo-4,13-diazatetradec-1-yl]-2,7-dioxo-18-thioxo-11,14-dioxo-3,8-diazaoctadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

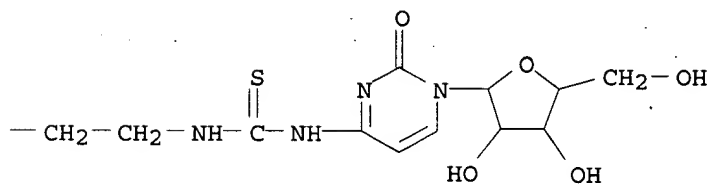




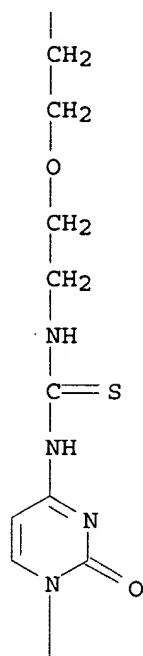
PAGE 1-B



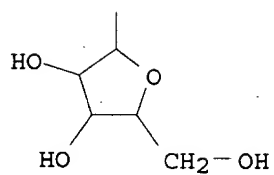
PAGE 1-C



PAGE 2-B



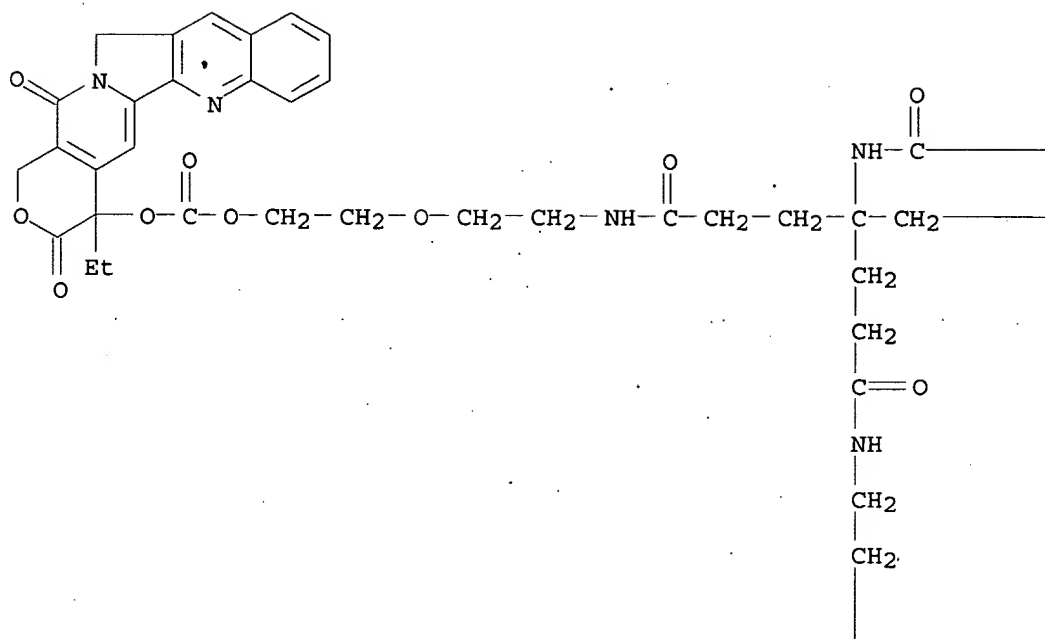
PAGE 3-B



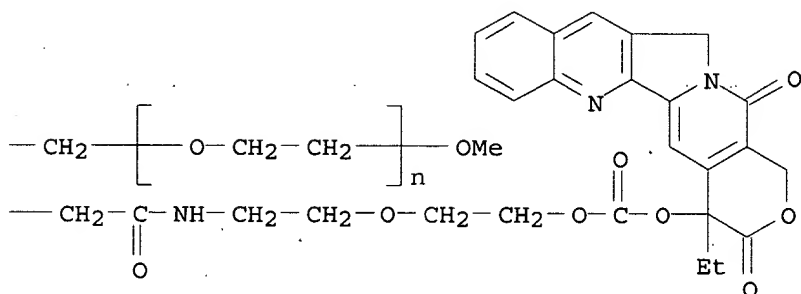
RN 396134-12-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[15-[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]-4,4'-bis[3-[[2-[2-[[[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]oxy]ethoxy]ethyl]amino]-3-oxopropyl]-2,7,15-trioxo-11,14-dioxo-3,8-diazapentadec-1-yl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

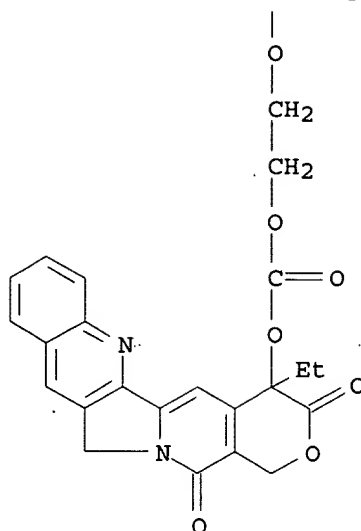
PAGE 1-A



PAGE 1-B

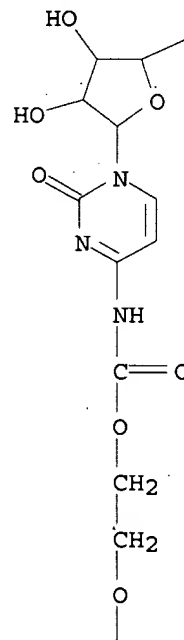


PAGE 2-A

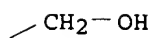


RN 396134-15-9 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[[[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]oxy]ethoxy  
 ]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

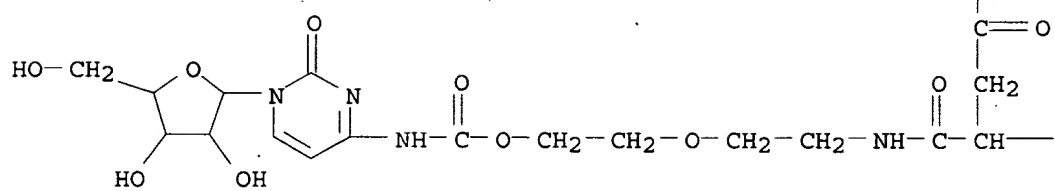
PAGE 1-A



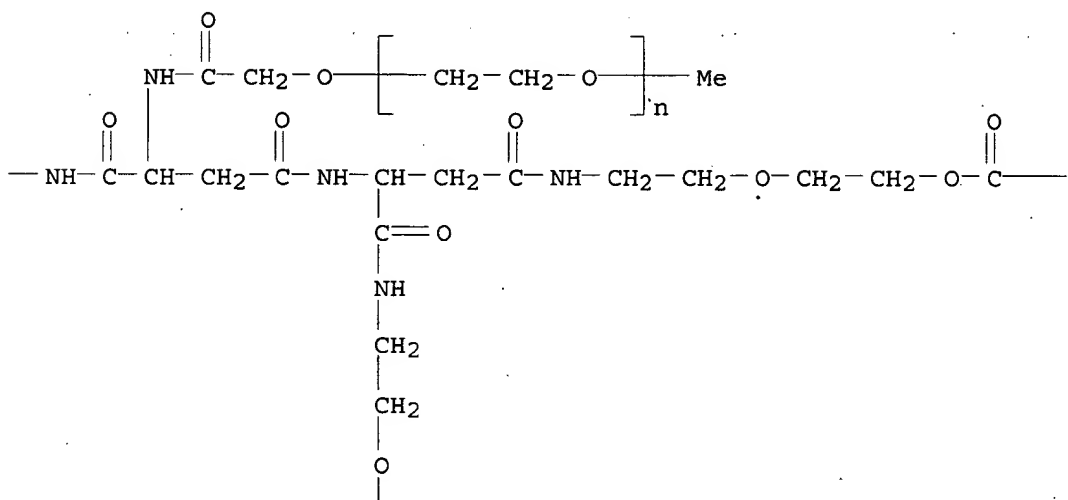
PAGE 1-B



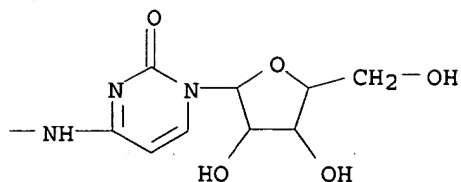
PAGE 2-A



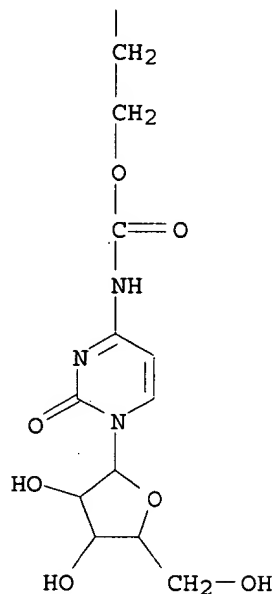
PAGE 2-B



PAGE 2-C



PAGE 3-B



RN 396134-16-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-  
 oxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

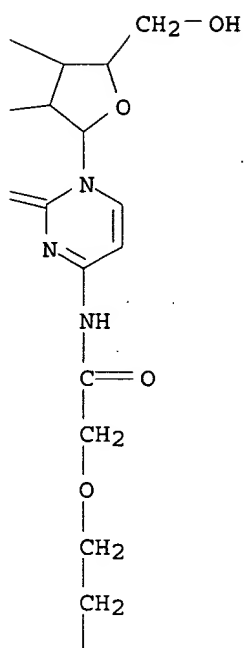
PAGE 1-A

HO

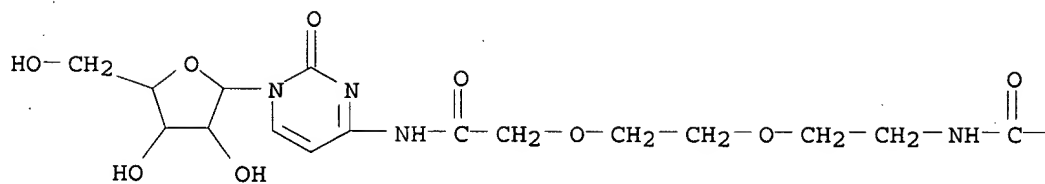
HO

O

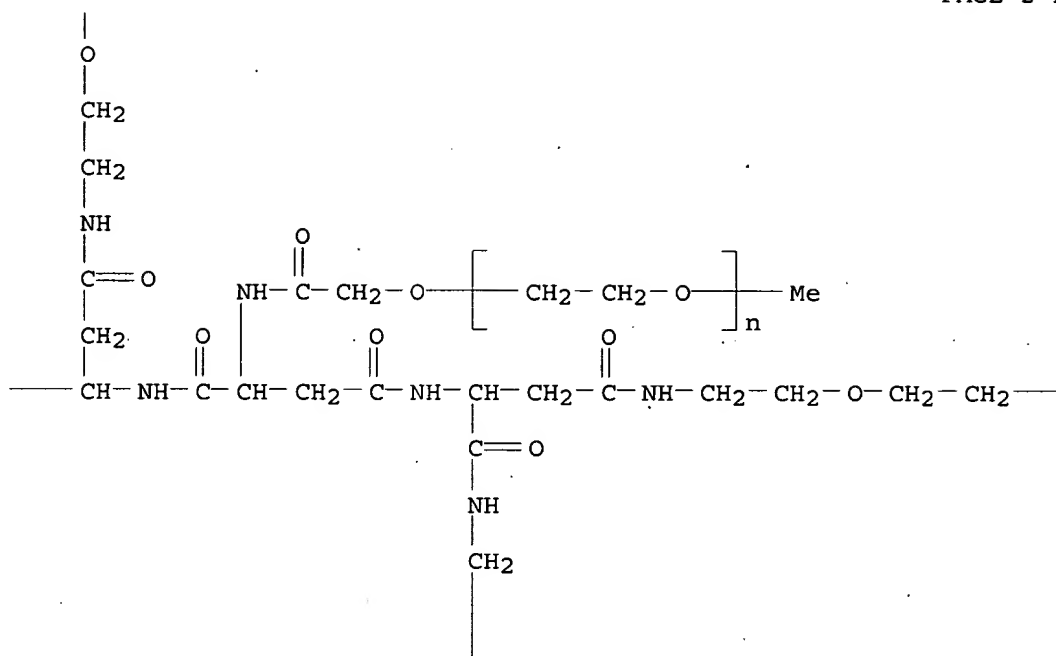
PAGE 1-B



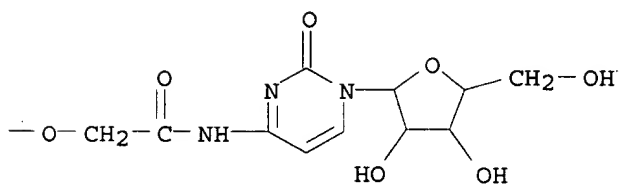
PAGE 2-A



PAGE 2-B

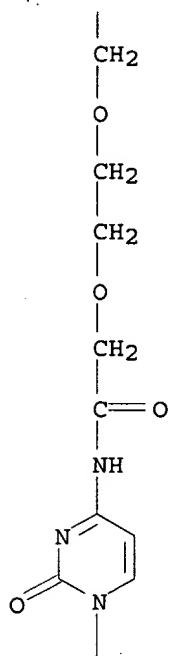


PAGE 2-C

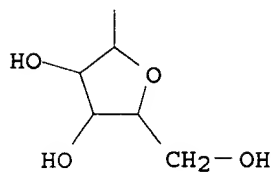




PAGE 3-B

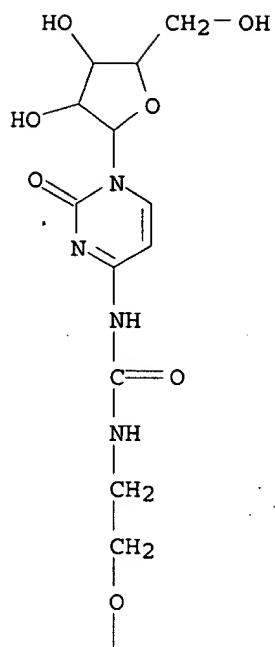


PAGE 4-B

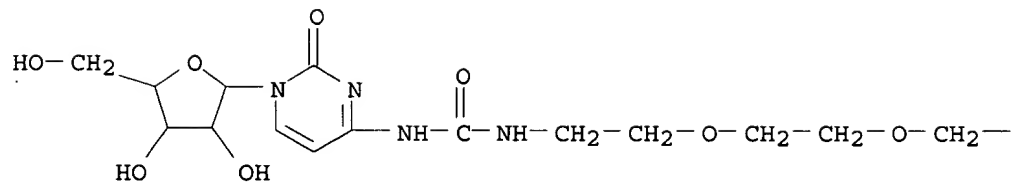


RN 396134-17-1 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[[[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]carbonyl]amino]etho  
 xy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

PAGE 1-B

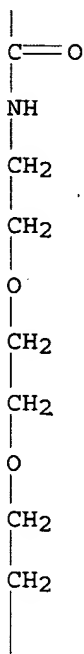


PAGE 2-A

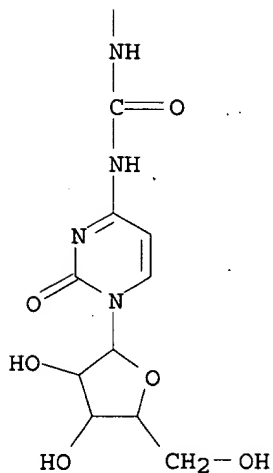




PAGE 3-B



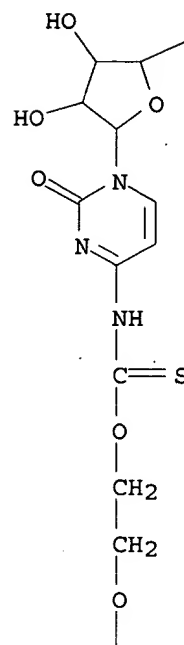
PAGE 4-B



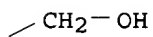
RN 396134-18-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[[[1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethoxy]ethox  
 y]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

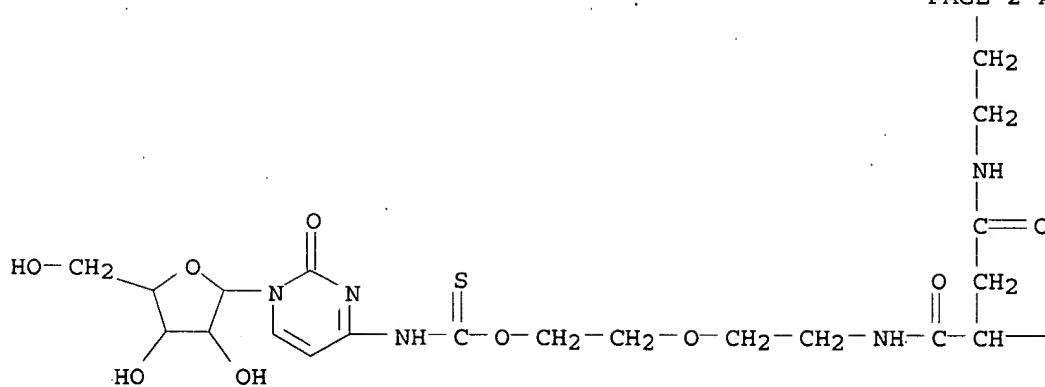
PAGE 1-A



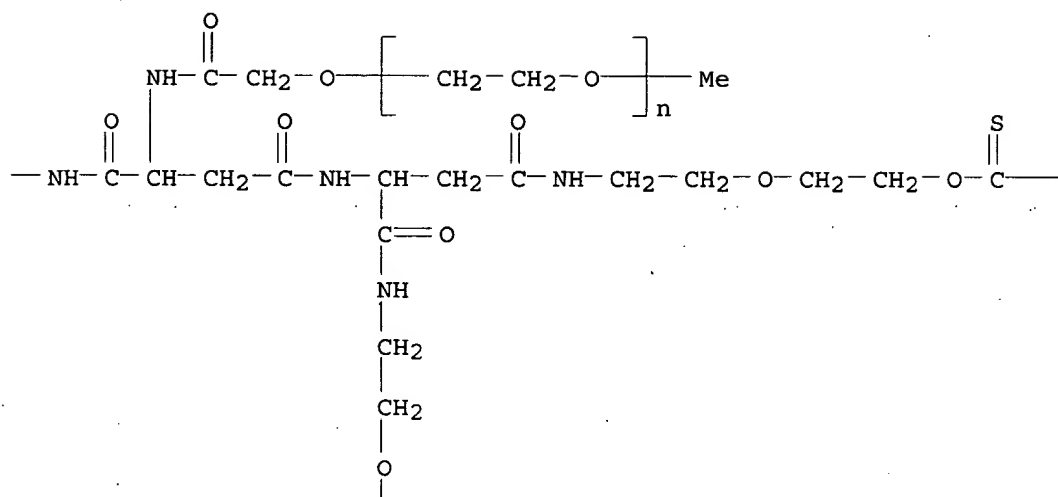
PAGE 1-B



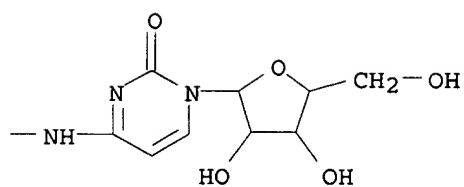
PAGE 2-A



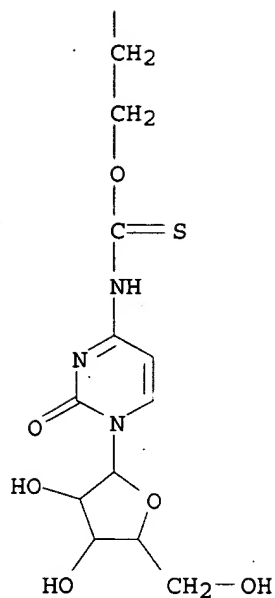
PAGE 2-B



PAGE 2-C



PAGE 3-B



RN 396134-19-3 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]-2-  
 thioxoethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

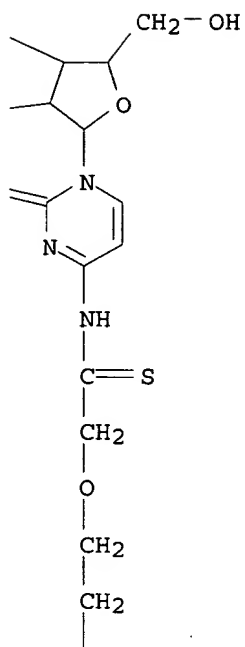
PAGE 1-A

HO—

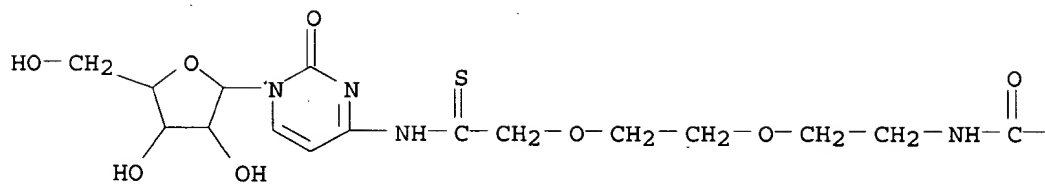
HO—

O=

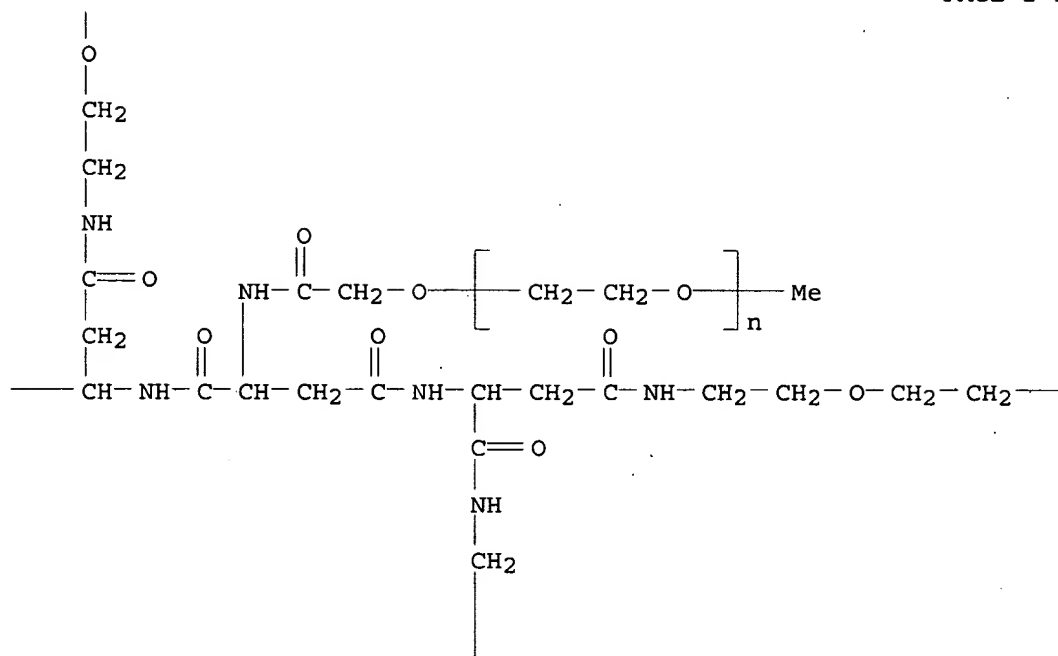
PAGE 1-B



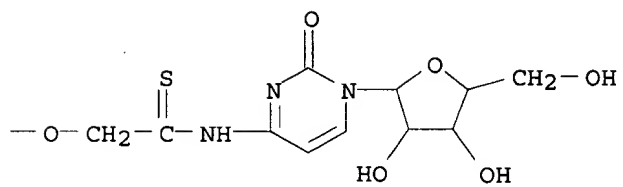
PAGE 2-A



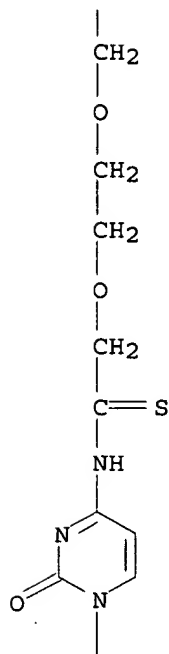




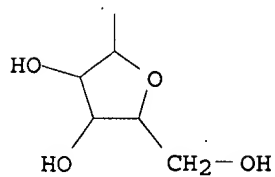
PAGE 2-C



PAGE 3-B



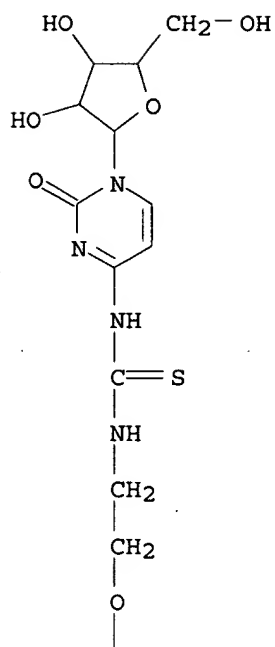
PAGE 4-B



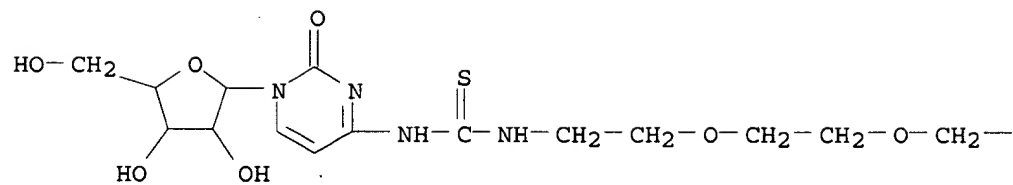
RN 396134-20-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, 1-ether with  
 N-(hydroxyacetyl)-L-aspartoylbis[N1,N4-bis[2-[2-[2-[[[(1-.beta.-D-  
 arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)amino]thioxomethyl]amino]  
 ethoxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

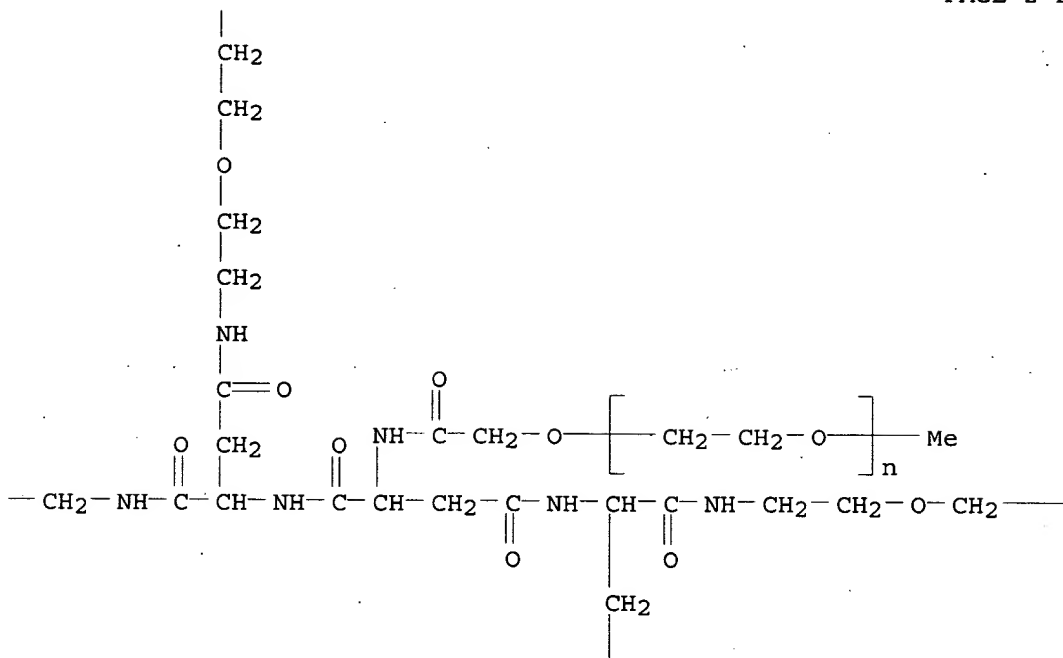
PAGE 1-B



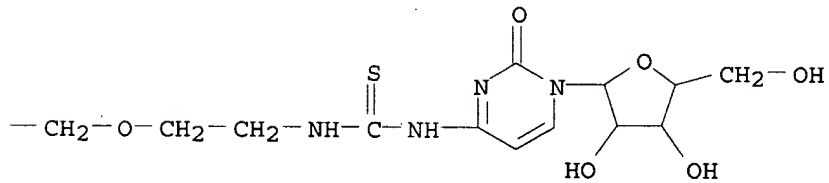
PAGE 2-A



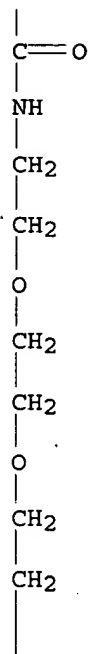
PAGE 2-B



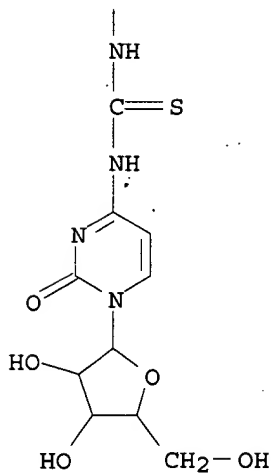
PAGE 2-C



PAGE 3-B



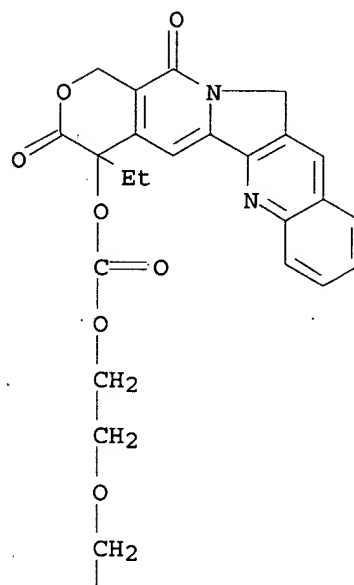
PAGE 4-B



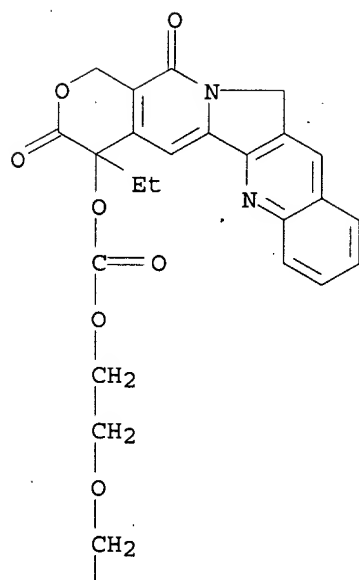
RN 396134-21-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with hydroxyacetyl-L-aspartoylbis [N1,N4-bis[2-[2-[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]oxy]ethoxy]ethyl]-L-aspartamide] (9CI) (CA INDEX NAME)

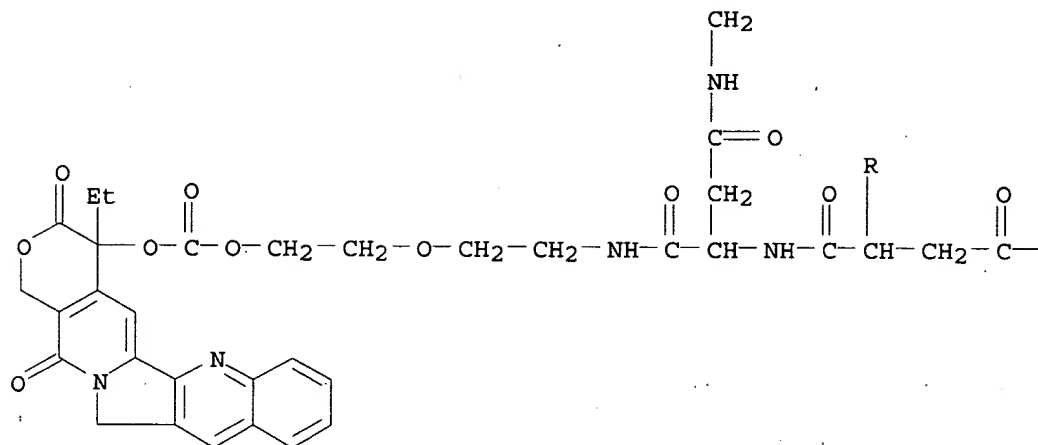
PAGE 1-A



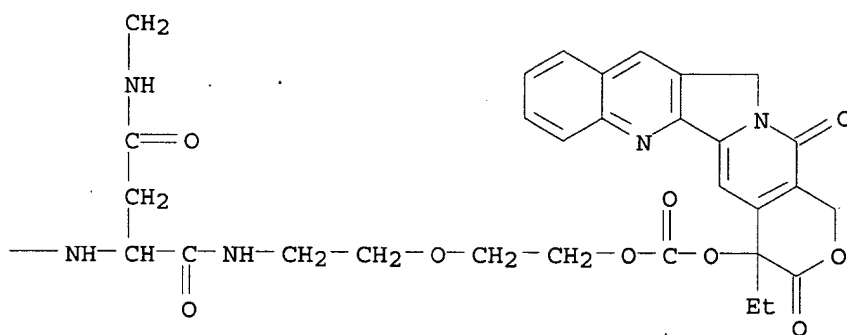
PAGE 1-B



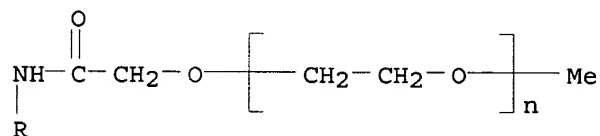
PAGE 2-A



PAGE 2-B



PAGE 3-A



IT 396134-13-7P 396134-14-8P 396134-24-0P

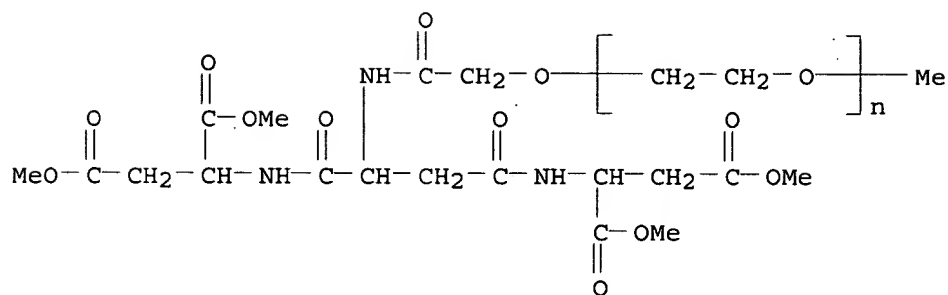
396134-25-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(terminally-branched polymeric linkers contg. extension moieties for prodrug conjugates)

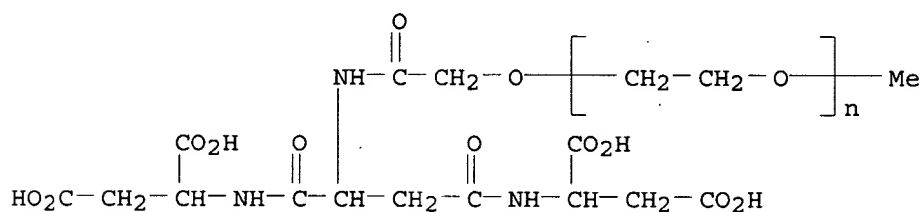
RN 396134-13-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] tetramethyl ester (9CI) (CA INDEX NAME)



RN 396134-14-8 HCAPLUS

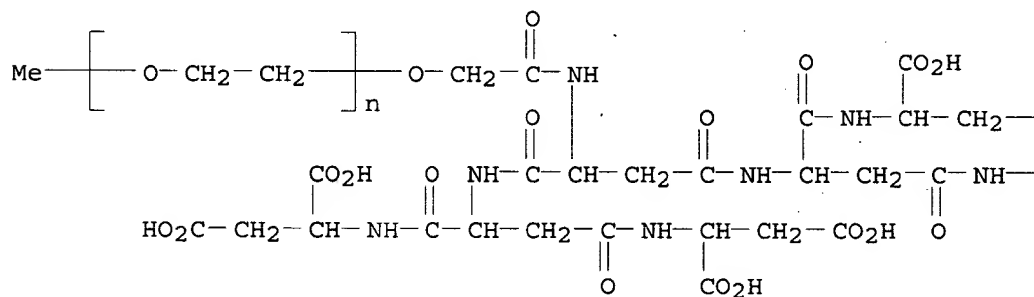
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with  
N-(hydroxyacetyl)-L-aspartoylbis[L-aspartic acid] (9CI) (CA INDEX NAME)



RN 396134-24-0 HCAPLUS

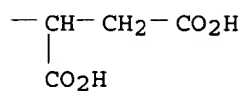
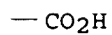
CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with  
N-(hydroxyacetyl)-L-aspartoylbis[L-aspartoylbis[L-aspartic acid]] (9CI)  
(CA INDEX NAME)

PAGE 1-A





PAGE 1-B

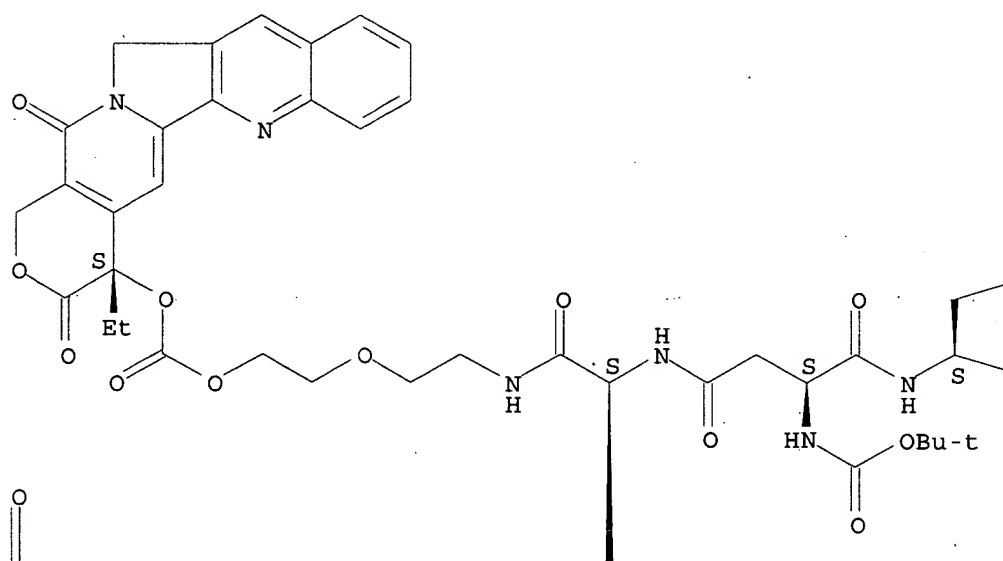


RN 396134-25-1 HCAPLUS

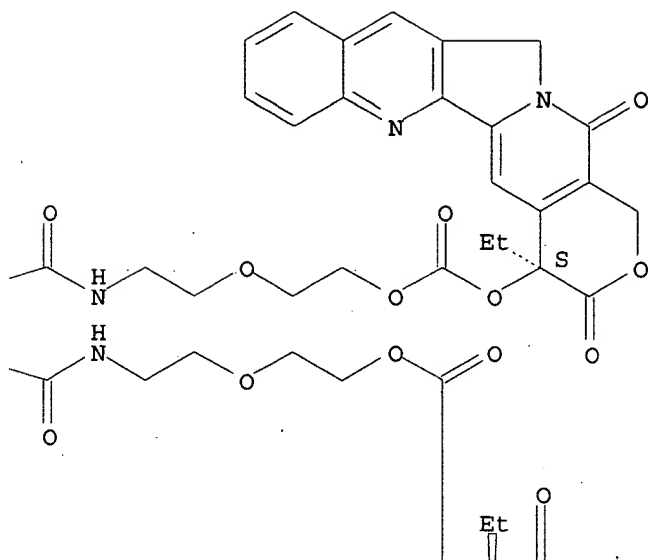
CN L-Aspartamide, N-[[[(1,1-dimethylethoxy) carbonyl]-L-aspartoyl]bis[N1,N4-bis[2-[2-[[[[[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl]oxy]carbonyl]oxy]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

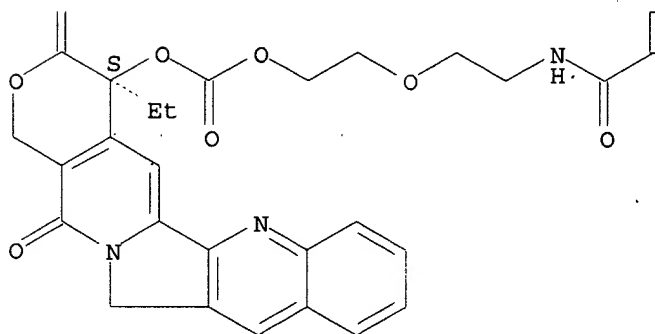
PAGE 1-A

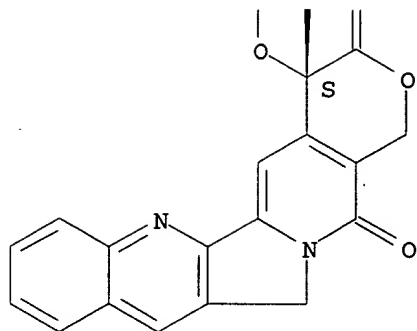


PAGE 1-B



PAGE 2-A





IT 367928-61-8P

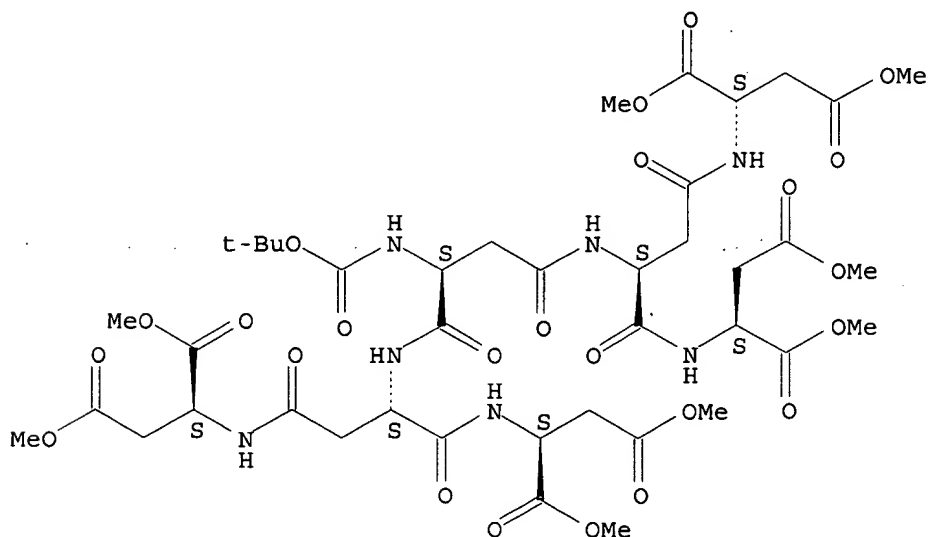
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(terminally-branched **polymeric** linkers contg. extension moieties for **prodrug conjugates**)

RN 367928-61-8 HCAPLUS

CN L-Aspartic acid, N-[(1,1-dimethylethoxy)carbonyl]-L-aspartoylbis[L-aspartoylbis-, octamethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:72705 HCAPLUS

DOCUMENT NUMBER: 136:123688

TITLE: Preparation of biodegradable high molecular weight **polymeric** linkers and their drug **conjugates**

INVENTOR(S): Greenwald, Richard B.; Zhao, Hong

PATENT ASSIGNEE(S): Greenwald, Richard, USA

SOURCE: U.S. Pat. Appl. Publ., 39 pp., Cont.-in-part of U.S. 6,251,382.

CODEN: USXXCO

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002009426	A1	20020124	US 2001-888072	20010622
US 6251382	B1	20010626	US 1999-293557	19990415
PRIORITY APPLN. INFO.:			US 1998-82105P	P 19980417
			US 1999-293557	A2 19990415

OTHER SOURCE(S): MARPAT 136:123688

AB The present invention includes polymeric transport systems such as prodrugs of polyoxyethylene with pharmaceuticals such as daunorubicin, and camptothecin. A soln. of of m-PEG acid, diaminopimelic aspartic acid camptothecin TFA salt, a 50% soln. of 1-propanephosphonic acid cyclic anhydride in EtOAc and N-dimethylaminopyridine in dry dichloromethane was stirred at room temp. overnight followed by washing with 1% aq. NaHCO<sub>3</sub> and 0.1N HCl soln. The solvent was removed, and the residue was crystd. from 2-propanol to yield the product.

IC ICM A61K031-785

ICS C08G063-91

NCL 424078180

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 26, 34, 37

ST **polymer prodrug conjugate** prepn; anticancer  
**polymer prodrug** prepn; polyoxyethylene **prodrug**  
 anticancer prepn

IT Antitumor agents

(prepn. of biodegradable high mol. wt. **polymeric linkers** and  
 their drug **conjugates**)

IT **Drug delivery** systems

(**prodrugs**; prepn. of biodegradable high mol. wt.  
**polymeric linkers** and their drug **conjugates**)

IT 96-53-7, 2-Thiazolidinethione 583-93-7 1791-13-5 6057-90-5

7689-03-4 13726-67-5 23541-50-6 24424-99-5 67665-18-3

204133-37-9 391612-43-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of biodegradable high mol. wt. **polymeric linkers** and  
 their drug **conjugates**)

IT 98469-29-5P 247920-06-5P 345967-44-4P 345967-45-5P 345967-47-7P

345967-49-9P 345967-51-3P 391612-44-5P 391612-45-6P 391612-46-7P

391612-47-8P 391612-48-9P 391612-49-0P 391669-40-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of biodegradable high mol. wt. **polymeric linkers** and  
 their drug **conjugates**)

IT 391612-50-3P 391612-51-4P 391612-52-5P 391669-39-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)

(prepn. of biodegradable high mol. wt. **polymeric linkers** and  
 their drug **conjugates**)

IT 147-94-4D, Cytosine arabinoside, **prodrugs** 148-82-3D,

Melphalan, **prodrugs** 2067-58-5D, **prodrugs**

20830-81-3D, **prodrugs** 23214-92-8D, Doxorubicin,

**prodrugs** 95058-81-4D, Gemcitabine, **prodrugs**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of biodegradable high mol. wt. **polymeric linkers** and  
 their drug **conjugates**)

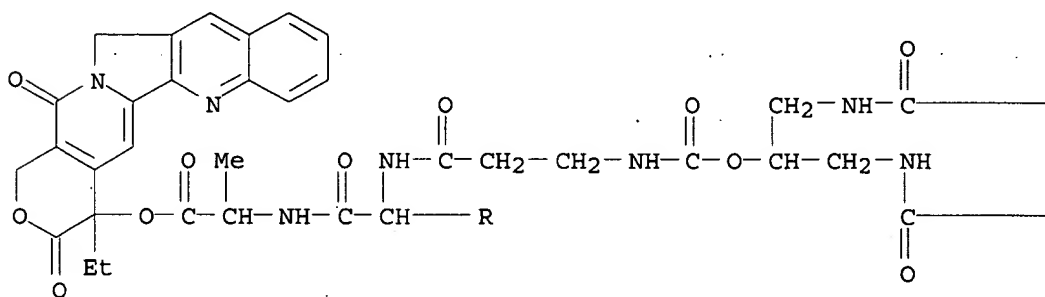
IT 391612-50-3P 391612-52-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of biodegradable high mol. wt. polymeric linkers and their drug conjugates)

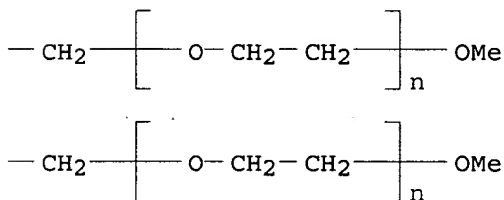
RN 391612-50-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, ether with N-[[2-[(hydroxyacetyl)amino]-1-[[[(hydroxyacetyl)amino]methyl]ethoxy]carbonyl]-.beta.-alanyl-L-aspartoyl-L-alanine bis[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl] ester (2:1) (9CI) (CA INDEX NAME)

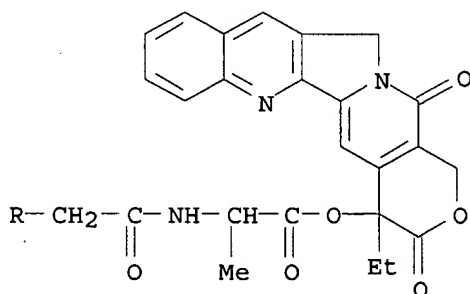
PAGE 1-A



PAGE 1-B



PAGE 2-A

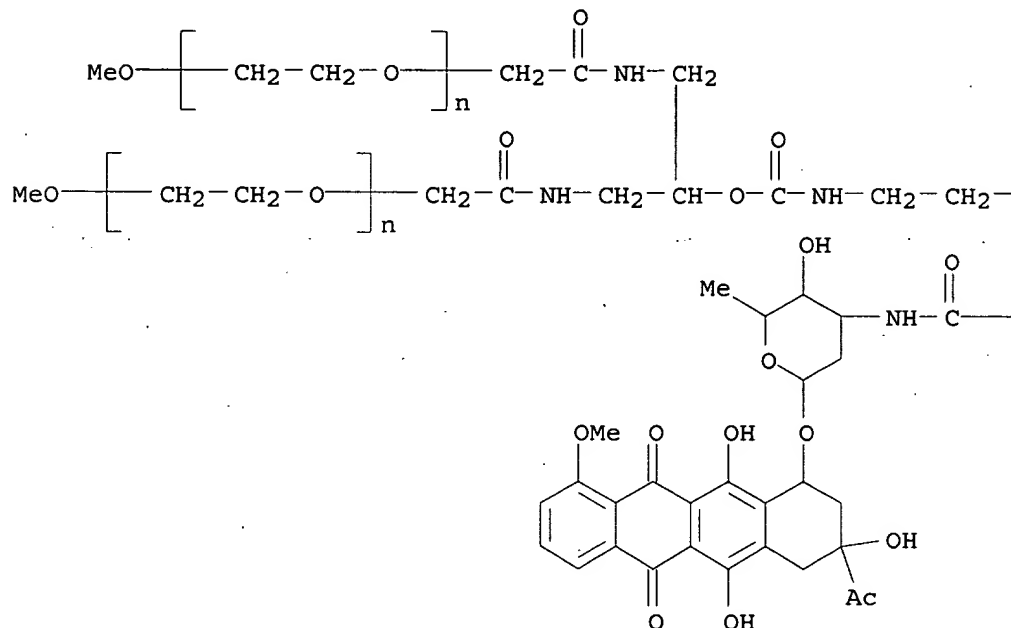


RN 391612-52-5 HCAPLUS

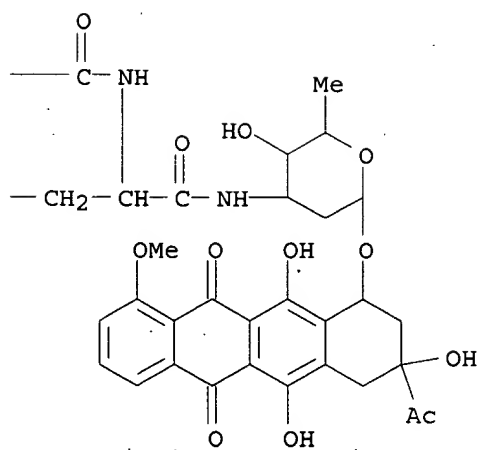
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-methoxy-, ether with 3',3'''-[N-[[2-[(hydroxyacetyl)amino]-1-[[[(hydroxyacetyl)amino]methyl]ethoxy]carbonyl]-.beta.-alanyl-L-aspartoyl-L-alanine bis[(4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl] ester (2:1) (9CI) (CA INDEX NAME)

xy]carbonyl]-.beta.-alanyl-L-aspartoyldiimino]bis[(8S,10S)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-10-[(2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-5,12-naphthacenedione] (2:1) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



ACCESSION NUMBER: 2001:934014 HCAPLUS  
 DOCUMENT NUMBER: 136:48463  
 TITLE: Cyclic peptide compounds and method for modulating neurite outgrowth  
 INVENTOR(S): Blaschuk, Orest W.; Gour, Barbara J.  
 PATENT ASSIGNEE(S): McGill University, Can.  
 SOURCE: U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 115,395.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 9  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6333307	B1	20011225	US 1999-250059	19990212
US 6031072	A	20000229	US 1997-893534	19970711
US 6169071	B1	20010102	US 1997-996679	19971223
US 6207639	B1	20010327	US 1998-115395	19980714
US 2002151475	A1	20021017	US 2001-6982	20011204
PRIORITY APPLN. INFO.:			US 1996-21612P	P 19960712
			US 1997-893534	A2 19970711
			US 1997-996679	A2 19971223
			US 1998-115395	A2 19980714
			US 2000-507102	A1 20000217

OTHER SOURCE(S): MARPAT 136:48463

AB Modulating agents comprising cyclic peptides, and compns. comprising such modulating agents, are provided. The cyclic peptides comprise a cadherin cell adhesion recognition sequence HAV. Methods for using such peptides and compns. for modulating and/or directing neurite outgrowth in a variety of contexts are also provided.

IC ICM A61K038-12

ICS A61K038-00

NCL 514009000

CC 1-11 (Pharmacology)

IT Drugs

(and drug-cyclic peptide **conjugates**; cyclic peptide compds. and method for modulating neurite outgrowth)

IT Adhesion, biological

Bioreactors

**Drug delivery** systems

Immobilization, molecular

Microparticles

Nervous system agents

Structure-activity relationship

(cyclic peptide compds. and method for modulating neurite outgrowth)

IT Plastics, biological studies

**Polymers**, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cyclic peptide compds. and method for modulating neurite outgrowth)

IT **Drug delivery** systems

(implants; cyclic peptide compds. and method for modulating neurite outgrowth)

IT **Drug delivery** systems

(**sustained-release**; cyclic peptide compds. and method for modulating neurite outgrowth)

IT **Drug delivery** systems

(targeting agent-cyclic peptide **conjugates**; cyclic peptide compds. and method for modulating neurite outgrowth)

IT 73205-86-4 110590-64-2 143304-79-4 170032-25-4 175294-44-7

202527-94-4	202527-98-8	202528-00-5	202528-03-8	202528-07-2
202528-10-7	214684-50-1	214684-52-3	<b>222169-86-0</b>	
222169-89-3	222169-90-6	229971-74-8	229971-80-6	249636-29-1
250268-78-1	250268-79-2	250268-80-5	250268-81-6	250268-82-7
250268-83-8	250268-84-9	250268-85-0	250268-86-1	250268-87-2
250268-88-3	250268-89-4	250268-90-7	250268-91-8	250271-33-1
250271-34-2	250271-35-3	250271-36-4	250271-37-5	250271-39-7
250271-41-1	255369-45-0	289914-94-9	<b>317320-19-7</b>	
331474-64-7	331474-65-8	331474-66-9	331474-67-0	331474-68-1
331474-69-2	331474-70-5	331474-71-6	331474-72-7	331474-73-8
331474-74-9	331474-75-0	331474-76-1	331474-77-2	331474-78-3
331474-79-4	331474-80-7	331474-81-8	331474-82-9	331474-83-0
331474-84-1	351974-94-2	351974-95-3	351974-96-4	351974-97-5
382656-70-4	382656-72-6	382656-73-7		

RL: PRP (Properties)

(Unclaimed; cyclic peptide compds. and method for modulating neurite outgrowth)

IT **222169-86-0 317320-19-7**

RL: PRP (Properties)

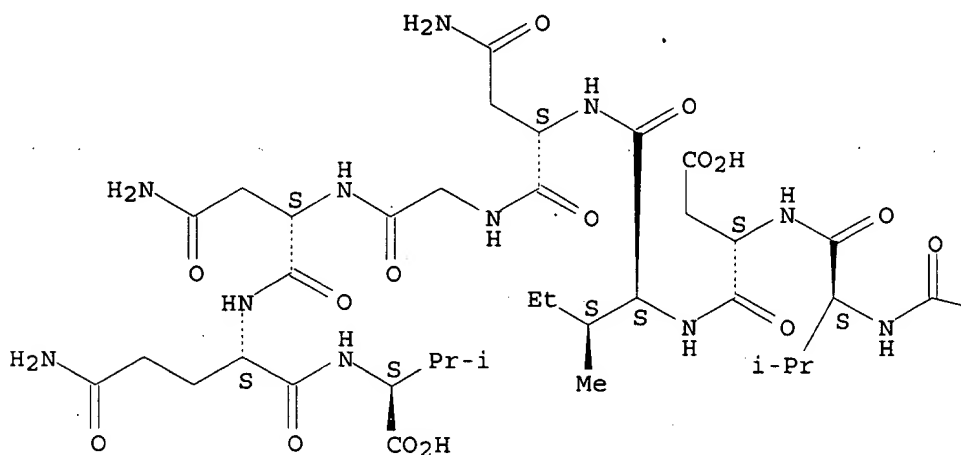
(Unclaimed; cyclic peptide compds. and method for modulating neurite outgrowth)

RN 222169-86-0 HCAPLUS

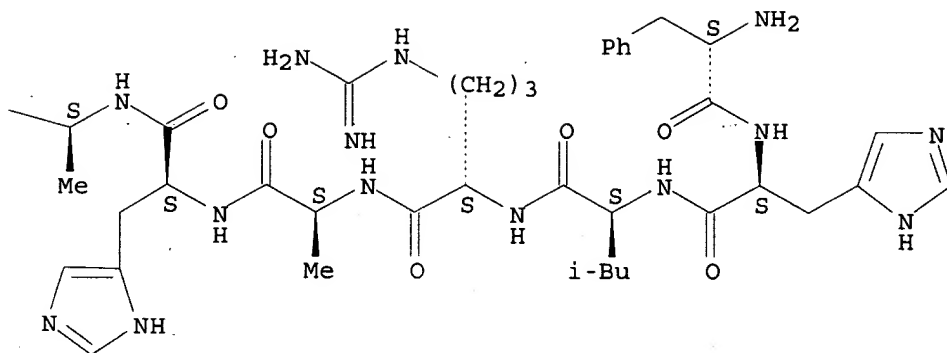
CN L-Valine, L-phenylalanyl-L-histidyl-L-leucyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L-valyl-L-.alpha.-aspartyl-L-isoleucyl-L-asparaginylglycyl-L-asparaginyl-L-glutaminy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



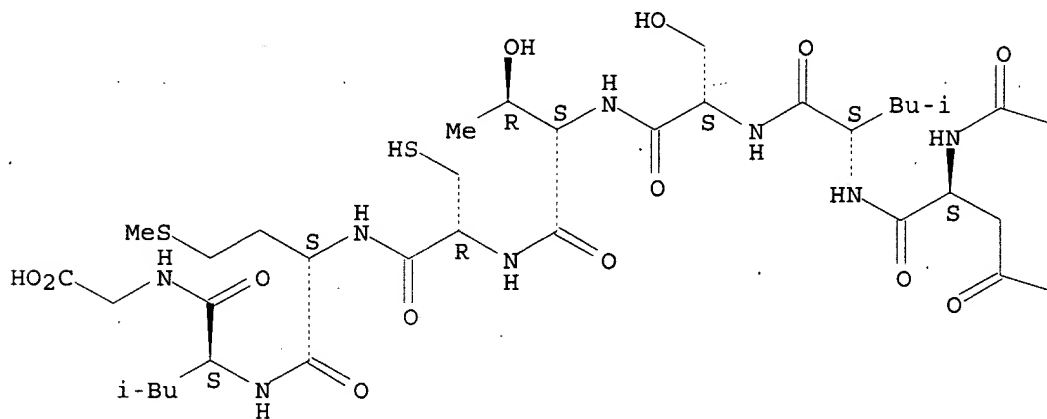


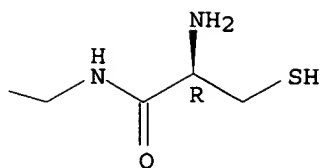


RN 317320-19-7 HCAPLUS

CN Glycine, L-cysteinylglycyl-L-asparaginyl-L-leucyl-L-seryl-L-threonyl-L-cysteinyl-L-methionyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



NH<sub>2</sub>

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:886568 HCAPLUS

DOCUMENT NUMBER: 136:42803

TITLE: Conjugate addition reactions for the controlled delivery of pharmaceutically active compounds

INVENTOR(S): Hubbel, Jeffrey A.; Elbert, Donald; Schoenmakers, Ronald

PATENT ASSIGNEE(S): Eidgenossische Technische Hochschule Zurich, Switz.; Universitat Zurich

SOURCE: PCT Int. Appl., 221 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092584	A1	20011206	WO 2001-US18101	20010604
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1292709	A1	20030319	EP 2001-941913	20010604
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
PRIORITY APPLN. INFO.:			US 2000-586937	A2 20000602
			WO 2001-US18101	W 20010604

after print date

OTHER SOURCE(S): MARPAT 136:42803

AB The invention features polymeric biomaterials formed by nucleophilic addn. reactions to conjugated unsatd. groups. These biomaterials may be used for medical treatments.

IC ICM C12Q001-68

ICS C07H021-04

CC 63-5 (Pharmaceuticals)

- Section cross-reference(s): 1, 2, 34, 35
- ST **polymer biomaterial addn reaction drug delivery**
- IT Cations  
     (-binding agents; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Carbohydrates, biological studies  
     RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (-binding agents; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Drug delivery systems**  
     (colloids; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Biological materials  
     Bone formation  
     Crosslinking agents  
         **Drug delivery systems**  
     Encapsulation  
     Human  
     Immobilization, molecular  
     Prosthetic materials and Prosthetics  
     Protein degradation  
     Substitution reaction, nucleophilic  
         (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Myoglobins  
     RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Amides, biological studies  
     Esters, biological studies  
     Polyoxyalkylenes, biological studies  
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Nucleic acids  
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Peptides, biological studies  
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Proteins  
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Ligands  
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT Addition reaction  
     (**conjugate**; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Drug delivery systems**  
     (**controlled-release**; **conjugate** addn.

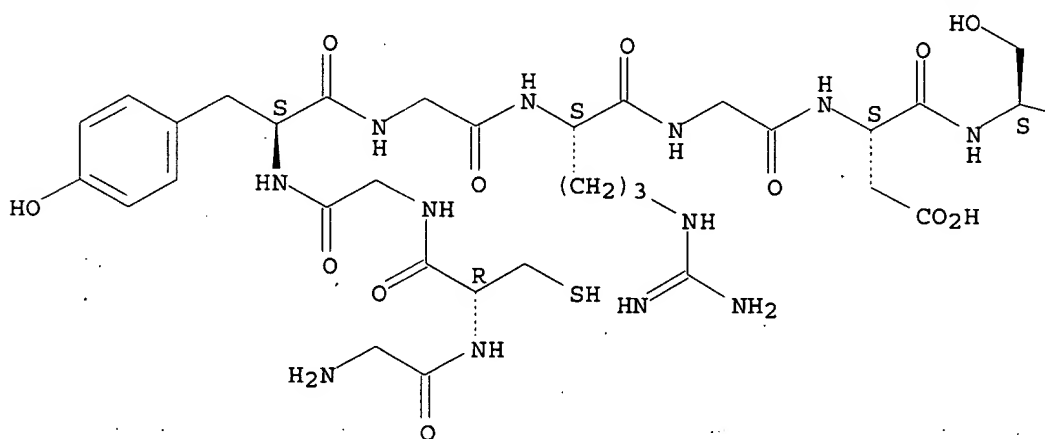
- reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Drug delivery systems**  
(gels; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Proteins**  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (heparin-binding; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Drug delivery systems**  
(hydrogels; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Polymerization**  
(photopolymer.; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Drug delivery systems**  
(prodrugs; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Skin**  
(regeneration; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Polymers, biological studies**  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(water-sol.; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT **Polymers, biological studies**  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(water-swallowable; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 9005-49-6, Heparin, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (-binding agents; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT 380504-60-9P  
RL: PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT 98-80-6, Phenylboronic acid 9061-61-4, Nerve growth factor 12619-70-4, Cyclodextrin  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT 26570-48-9P, Polyethylene glycol diacrylate 101661-95-4P 119388-27-1P 287184-65-0P 287184-66-1P 287184-69-4P  
RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)
- IT 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid 9003-39-8, POLYVINYLPIRROLIDONE 25067-34-9 25189-55-3, Poly(N-isopropylacrylamide) 25322-68-3, Polyethylene glycol 25805-17-8, Poly(ethyloxazoline) 26793-34-0, Poly(dimethylacrylamide) 106392-12-5, Poly(ethylene oxide)-poly(propylene oxide) block copolymer 129128-87-6  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological

- study); USES (Uses)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 362-07-2, 2-Methoxyestradiol 23214-92-8, Doxorubicin 33069-62-4,  
 Paclitaxel  
 RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use);  
 BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 50-28-2, Estradiol, biological studies 50-91-9, 5-Fluorodeoxyuridine  
 7689-03-4, Camptothecin  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 287184-73-0P 287184-74-1P 287184-75-2P 287184-76-3P  
 287184-77-4P 287184-78-5P 287184-79-6P  
 287184-80-9P 287184-81-0P 287184-82-1P 287184-83-2P  
 RL: PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic  
 use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 377733-59-0P  
 RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 76-84-6, Triphenylmethanol 107-96-0, 3-Mercaptopropionic acid  
 998-40-3, Tributylphosphine 2906-60-7 87199-17-5, 4-  
 Formylphenylboronic acid  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 1095-85-8P, 2-Tritylthioethylamine 23214-92-8DP, Doxorubicin,  
 thiopropionate derivs. 27144-18-9P, 3-Tritylthio-propionic acid  
 138441-75-5P 377733-50-1P 377733-53-4P 377733-56-7P 377733-62-5P  
 377733-64-7P 377733-66-9P 377733-67-0P 377733-69-2P 377733-71-6P  
 377733-74-9P 377733-75-0P 377733-76-1P 377733-77-2P 377733-78-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 33069-62-4DP, Paclitaxel, polyethylene glycol conjugates  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)
- IT 287413-07-4P  
 RL: PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic  
 use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (nucleotide sequence; conjugate addn. reactions for the  
 controlled delivery of pharmaceutically active compds.)
- IT 9001-90-5, Plasmin  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (peptide; conjugate addn. reactions for the controlled  
 delivery of pharmaceutically active compds.)
- IT 380606-23-5 380606-24-6 380606-25-7 380606-26-8 380606-34-8  
 RL: PRP (Properties)  
 (unclaimed protein sequence; conjugate addn. reactions for  
 the controlled delivery of pharmaceutically active compds.)

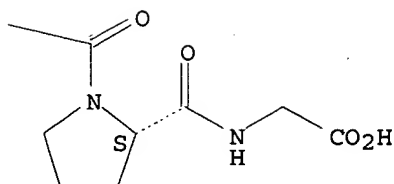
IT 380428-31-9 380428-32-0 380428-33-1  
 RL: PRP (Properties)  
 (unclaimed sequence; conjugate addn. reactions for the  
 controlled delivery of pharmaceutically active compds.)  
 IT 287184-76-3P 287184-77-4P 287184-78-5P  
 287184-79-6P  
 RL: PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic  
 use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (conjugate addn. reactions for the controlled delivery of  
 pharmaceutically active compds.)  
 RN 287184-76-3 HCAPLUS  
 CN Glycine, glycyl-L-cysteinylglycyl-L-tyrosylglycyl-L-arginylglycyl-L-  
 .alpha.-aspartyl-L-seryl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

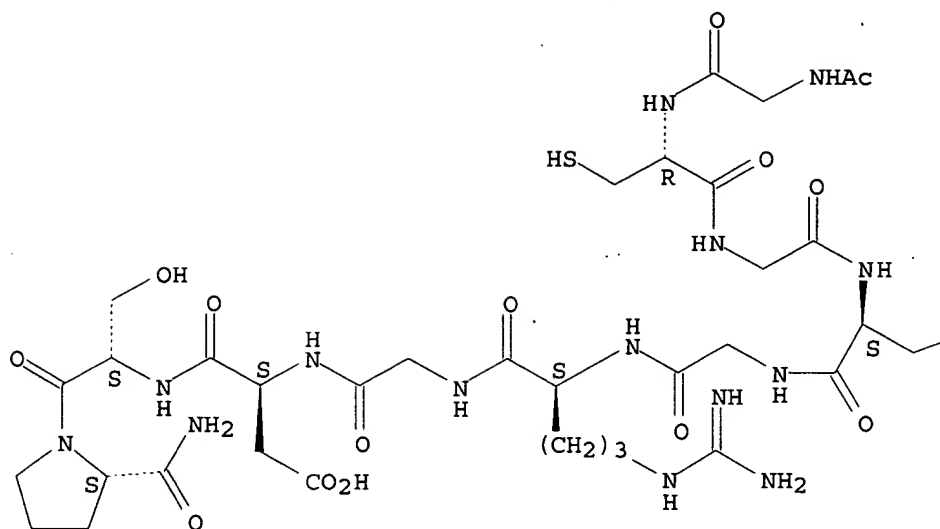


PAGE 1-B

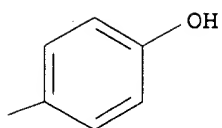


RN 287184-77-4 HCAPLUS  
 CN L-Prolinamide, N-acetylglycyl-L-cysteinylglycyl-L-tyrosylglycyl-L-  
 arginylglycyl-L-.alpha.-aspartyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



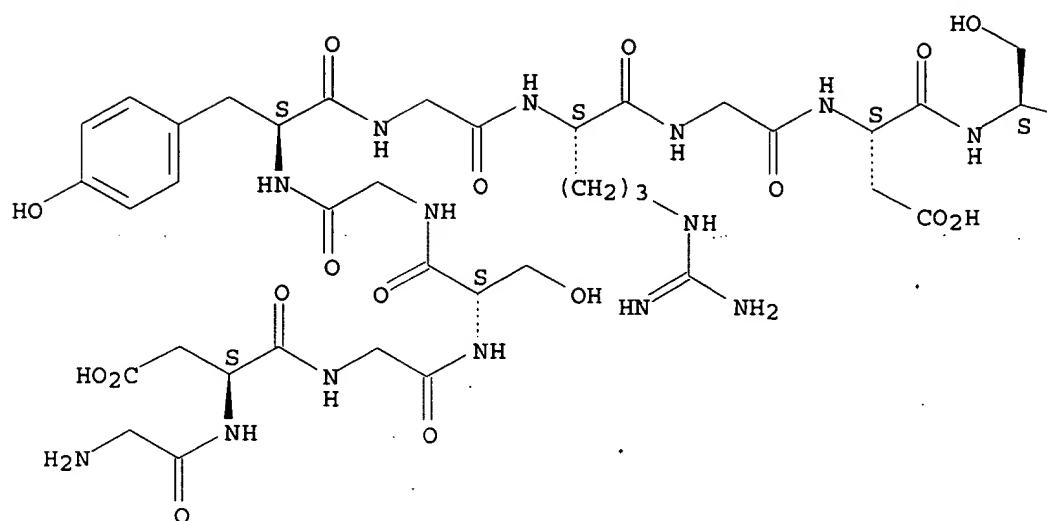
PAGE 1-B



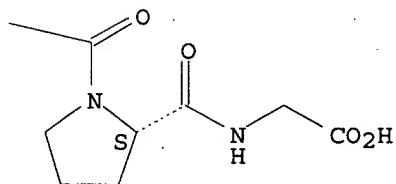
CN Glycine, glycyl-L-.alpha.-aspartylglycyl-L-serylglycyl-L-tyrosylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-seryl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

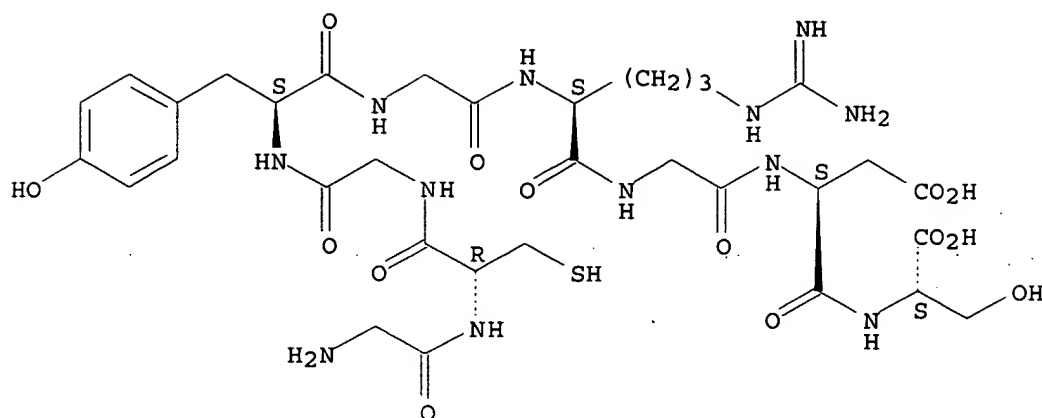


RN 287184-79-6 HCAPLUS

CN L-Serine, glycyl-L-cysteinylglycyl-L-tyrosylglycyl-L-arginylglycyl-L-  
.alpha.-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





IT 377733-59-0P

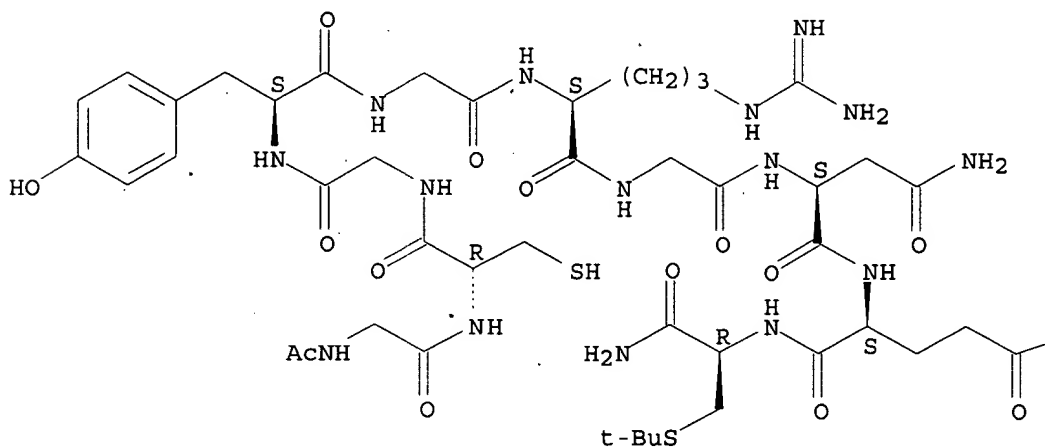
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
RACT (Reactant or reagent)(conjugate addn. reactions for the controlled delivery of  
pharmaceutically active compds.)

RN 377733-59-0 HCAPLUS

CN L-Cysteinamide, N-acetylglycyl-L-cysteinyglycyl-L-tyrosylglycyl-L-  
arginylglycyl-L-asparaginyl-L-glutaminyl-S-(1,1-dimethylethyl)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



—NH<sub>2</sub>

IT 380428-31-9 380428-33-1

RL: PRP (Properties)

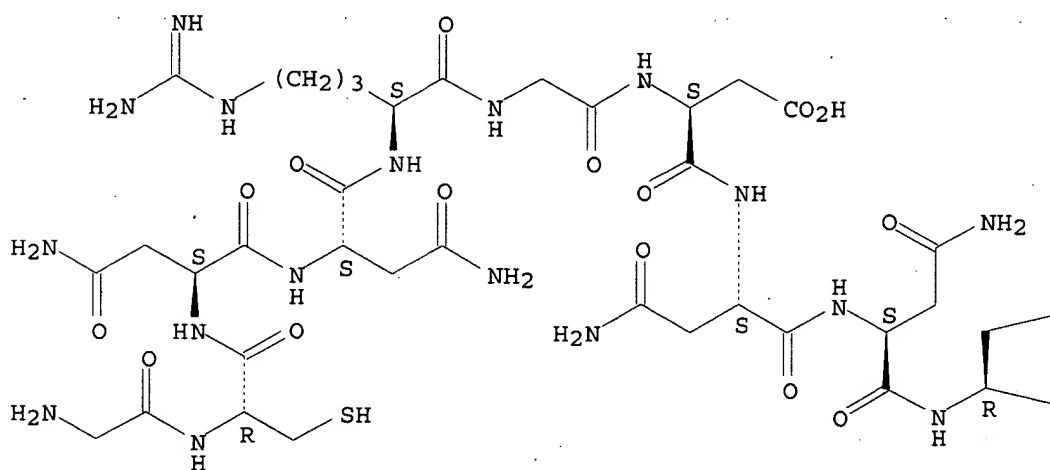
(unclaimed sequence; **conjugate** addn. reactions for the controlled delivery of pharmaceutically active compds.)

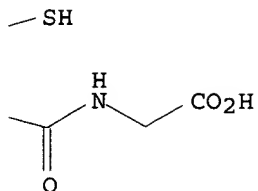
RN 380428-31-9 HCAPLUS

CN Glycine, glycyl-L-cysteinyl-L-asparaginyl-L-asparaginyl-L-arginylglycyl-L-.alpha.-aspartyl-L-asparaginyl-L-asparaginyl-L-cysteinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

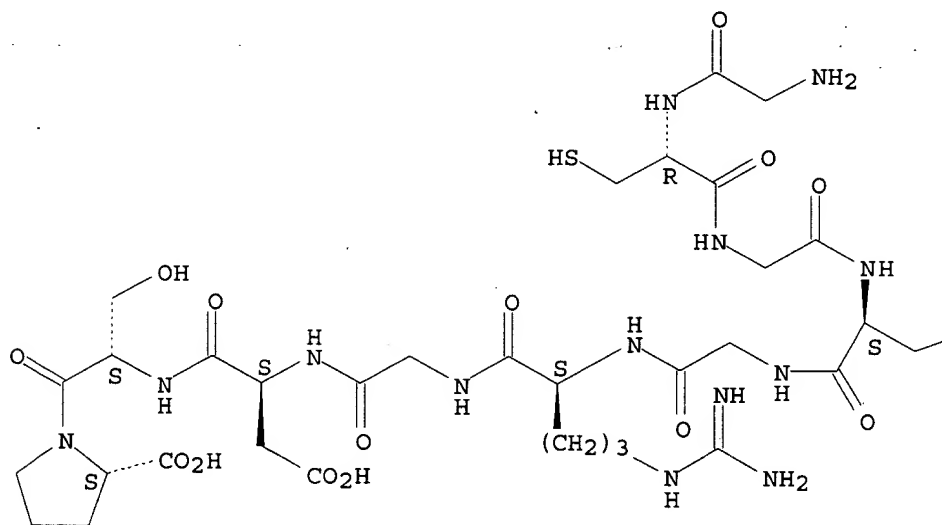


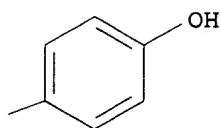


RN 380428-33-1 HCAPLUS

CN L-Proline, glycyl-L-cysteinylglycyl-L-tyrosylglycyl-L-arginylglycyl-L-  
.alpha.-aspartyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

L18 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:868181 HCAPLUS

DOCUMENT NUMBER: 136:11133

TITLE: Prolonged-release microspheres for injection and preparation method

INVENTOR(S): Dulieu, Claire; Richard, Joeel; Benoit, Jean-Pierre

PATENT ASSIGNEE(S): Mainelab, Fr.; Laboratoires des Produits Ethiques Ethypharm

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001089481	A1	20011129	WO 2001-FR1575	20010522
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
FR 2809309	A1	20011130	FR 2000-6587	20000523
BR 2001011054	A	20030415	BR 2001-11054	20010522
EP 1303259	A1	20030423	EP 2001-938300	20010522
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
NO 2002005552	A	20030120	NO 2002-5552	20021119
PRIORITY APPLN. INFO.:			FR 2000-6587	A 20000523
			WO 2001-FR1575	W 20010522

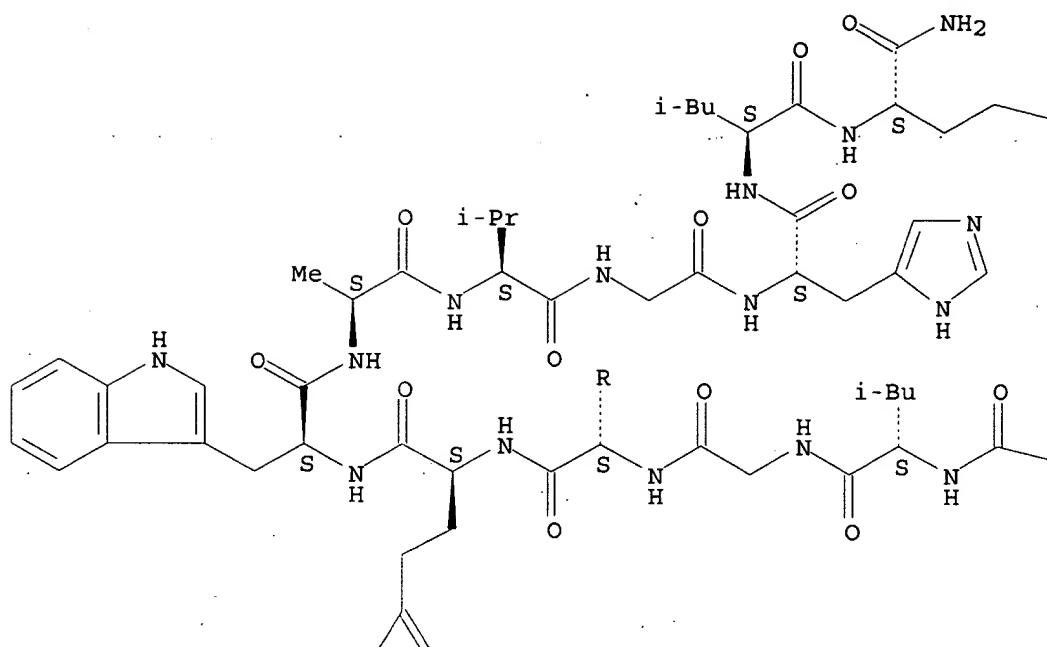
AB The invention concerns microspheres for injection comprising a protein active principle and an agent coating the active principle, designed to prolong its release, free of any trace of org. solvent, and obtainable by a coating method which involves contacting under agitation the active principle with the coating agent in a supercrit. fluid, said coating agent

being sol. in the supercrit. fluid. The protein active principle is not denatured. Microspheres of Gelucire 50/02 contg. bovine serum albumin was prepd. using carbon dioxide as supercrit. fluid.

- IC ICM A61K009-16  
 CC 63-6 (Pharmaceuticals)  
 IT **Polymers**, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (biodegradable; prolonged-release microspheres for injection and prepn. method)  
 IT Polyoxyalkylenes, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (conjugates with adenosine deaminase or L-asparaginase; prolonged-release microspheres for injection and prepn. method)  
 IT **Drug delivery systems**  
 (microspheres, **sustained-release**; prolonged-release microspheres for injection and prepn. method)  
 IT 57-10-3D, Palmitic acid, glycerides 57-11-4D, Stearic acid, glycerides 113-79-1, Arginine vasopressin 124-06-1, Ethyl myristate 544-63-8D, Myristic acid, glycerides 555-43-1, Dynasan 118 555-44-2, Dynasan 116 555-45-3, Dynasan 114 628-97-7, Ethyl palmitate 1407-47-2, Angiotensin 2462-63-7, Dioleoylphosphatidylethanolamine 2644-64-6, Dipalmitoylphosphatidylcholine 8001-27-2, Hirudin 9001-27-8 9001-28-9, Blood Coagulation factor IX 9002-64-6, Parathyroid hormone 9002-72-6, Somatotropin 9003-11-6, Ethylene oxide propylene oxide copolymer 9004-10-8, Insulin, biological studies 9007-12-9, Calcitonin 9015-68-3D, L-Asparaginase, **conjugates** with PEG 9015-71-8, Corticotropin releasing hormone 9026-93-1D, Adenosine deaminase, **conjugates** with PEG 9033-10-7, Glycosylceramidase 9034-39-3, Growth hormone releasing factor 9034-40-6, Lhrh 9061-61-4, Nerve growth factor 24305-27-9, Thyrotropin releasing hormone 24980-41-4, Poly(.epsilon.-caprolactone 25248-42-4, Poly[oxy(1-oxo-1,6-hexanediyl)] 25322-68-3, Polyethylene glycol 25322-68-3D, PEG, **conjugates** with adenosine deaminase or L-asparaginase 26009-03-0, Polyglycolide 26063-00-3, Poly(.beta.-hydroxybutyrate 26161-42-2 26202-08-4, Polyglycolide 26780-50-7, Polylactide-co-glycolide 31362-50-2, Bombesin 33135-50-1, Poly L-lactide 34346-01-5, Glycolic acid lactic acid copolymer 37221-79-7, Vasoactive intestinal peptide 51110-01-1, Somatostatin 57773-63-4, Triptorelin 61361-72-6, Dimyristoyl phosphatidylglycerol 65312-43-8, Blood coagulation factor VIIa 68737-67-7 78644-42-5, Polymalic acid 80043-53-4, Gastrin releasing peptide 83826-43-1, Octyldodecyl myristate 83869-56-1, Granulocyte macrophage colony stimulating factor 102190-94-3, Poly(hydroxyvaleric acid) 103370-86-1, Humoral hypercalcemic factor 105913-11-9, Plasminogen activator 106602-62-4, Amylin 117563-96-9, Polyethylene glycol-lactic acid block copolymer 120081-14-3D, derivs. 121181-53-1, Filgrastim 123774-72-1, Sargramostim 125622-72-2, Gelucire 50/02 133197-54-3 135968-09-1, Lenograstim 137061-48-4, Pituitary adenylate cyclase activating polypeptide 143011-72-7, Granulocyte colony stimulating factor  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prolonged-release microspheres for injection and prepn. method)  
 IT **31362-50-2, Bombesin**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prolonged-release microspheres for injection and prepn. method)  
 RN 31362-50-2 HCAPLUS  
 CN Bombesin (9CI) (CA INDEX NAME)

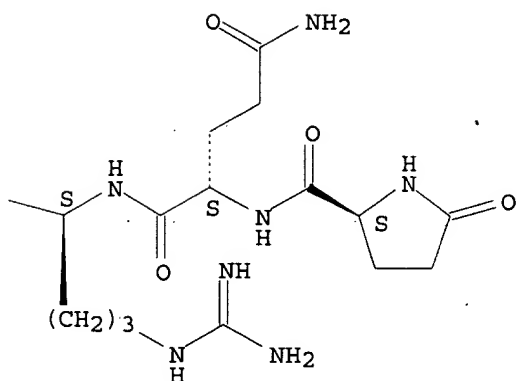
Absolute stereochemistry.

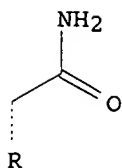
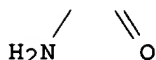
PAGE 1-A



PAGE 1-B

SMe





REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE. FORMAT

L18 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:535199 HCAPLUS

DOCUMENT NUMBER: 133:155432

TITLE: Preparation of biomaterials formed by nucleophilic addition reaction to **conjugated unsaturated polymers**

INVENTOR(S): Hubbell, Jeffrey A.; Elbert, Donald; Lutolf, Matthias; Pratt, Alison; Schoenmakers, Ronald; Tirelli, Nicola; Vernon, Brent

PATENT ASSIGNEE(S): Switz.

SOURCE: PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000044808	A1	20000803	WO 2000-US2608	20000201
W: AU, BR, CA, CN, CZ, GE, HU, ID, IL, IS, JP, KR, MX, NO, NZ, PL, RO, RU, SG, TR, UA, US, YU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2359318	AA	20000803	CA 2000-2359318	20000201
EP 1181323	A1	20020227	EP 2000-910049	20000201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002535108	T2	20021022	JP 2000-596061	20000201
PRIORITY APPLN. INFO.: US 1999-118093P A2 19990201				
WO 2000-US2608 W 20000201				

AB The invention features polymeric biomaterials formed by nucleophilic addn. reactions to conjugated unsatd. groups. These biomaterials may be used for medical treatments. Thus, polyethylene glycol triacrylate was dissolved in pH 8 50-mM HEPES buffered saline at 20% with 2% albumin. PEG dithiol was dissolved in pH 5.6 1-mM MES buffered saline at 20%. The liq. soln. was added to cyclohexane contg. Hypermer B239. The polymd., protein-contg. spheres were then washed with cyclohexane to remove surfactant, followed by drying in vacuum to remove cyclohexane. The particles were then resuspended in pH 7.4 HEPES buffered saline. Protein concns. in the resuspending medium were detd. from a concn. std. curve for albumin at 280 nm.

- IC ICM C08G063-48
- ICS C08G063-91; C12N011-02; C12N011-04; C12N011-06; C12N011-08;  
G01N033-544; G01N033-545; G01N033-546; G01N033-549
- CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 34, 37
- ST biomaterial nucleophilic addn reaction unsatd **polymer**; PEG  
acrylate cysteine addn reaction biomaterial; **drug**  
**delivery** nucleophilic addn reaction unsatd **polymer**;  
implant nucleophilic addn reaction unsatd **polymer**
- IT Skin  
(artificial; prepn. of biomaterials formed by nucleophilic addn.  
reaction to **conjugated** unsatd. **polymers**)
- IT **Drug delivery** systems  
(**controlled-release**; prepn. of biomaterials formed  
by nucleophilic addn. reaction to **conjugated** unsatd.  
**polymers**)
- IT Meninges  
(dura mater; prepn. of biomaterials formed by nucleophilic addn.  
reaction to **conjugated** unsatd. **polymers**)
- IT Bone formation  
(ectopic; prepn. of biomaterials formed by nucleophilic addn. reaction  
to **conjugated** unsatd. **polymers**)
- IT **Drug delivery** systems  
(gels; prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated** unsatd. **polymers**)
- IT Prosthetic materials and Prosthetics  
(implants; prepn. of biomaterials formed by nucleophilic addn. reaction  
to **conjugated** unsatd. **polymers**)
- IT Addition reaction  
Addition reaction kinetics  
(nucleophilic; prepn. of biomaterials formed by nucleophilic addn.  
reaction to **conjugated** unsatd. **polymers**)
- IT Plasmid vectors  
(pUC18; prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated** unsatd. **polymers**)
- IT Biocompatibility  
Blood vessel  
Cartilage  
Emulsifying agents  
Encapsulation  
Gelation  
Hydrophile-lipophile balance value  
Immobilization, biochemical  
Intestine  
Lung  
Medical goods  
Molecular cloning  
Molecular weight distribution  
Nerve  
Protein sequences  
Strength  
Surfactants  
Swelling, physical  
Viscosity  
Young's modulus  
cDNA sequences  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated** unsatd. **polymers**)
- IT Fusion proteins (chimeric proteins)  
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic

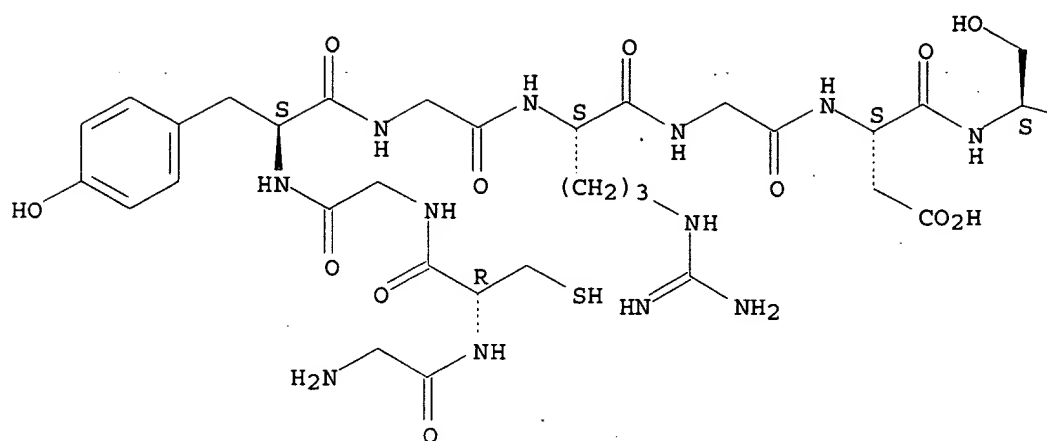


- use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated unsatd. polymers**)
- IT Antisense DNA  
DNA  
Growth factors, animal  
Nucleic acids  
RNA  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated unsatd. polymers**)
- IT Polyoxyalkylenes, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated unsatd. polymers**)
- IT Myoglobins  
Peptides, biological studies  
Polyoxyalkylenes, biological studies  
Proteins, general, biological studies  
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated unsatd. polymers**)
- IT Drug delivery systems  
(**prodrugs**; prepn. of biomaterials formed by nucleophilic  
addn. reaction to **conjugated unsatd. polymers**)
- IT 287413-06-3P  
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(amino acid sequence; prepn. of biomaterials formed by nucleophilic  
addn. reaction to **conjugated unsatd. polymers**)
- IT 287413-07-4P  
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(nucleotide sequence; prepn. of biomaterials formed by nucleophilic  
addn. reaction to **conjugated unsatd. polymers**)
- IT 9061-61-4, Nerve growth factor  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(plasmid encoding; prepn. of biomaterials formed by nucleophilic addn.  
reaction to **conjugated unsatd. polymers**)
- IT 287184-83-2  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated unsatd. polymers**)
- IT 7575-23-7DP, **conjugate** addn. product with PEG diacrylate  
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to  
**conjugated unsatd. polymers**)
- IT 52-90-4, Cysteine, reactions 100-43-6, 4-Vinylpyridine 102-56-7,  
2,5-Dimethoxyaniline 105-36-2, Ethyl 2-bromoacetate 3350-78-5  
7575-23-7 10487-71-5, Crotonoyl chloride 25322-68-3 31694-55-0  
33007-83-9 287184-70-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of biomaterials formed by nucleophilic addn. reaction to

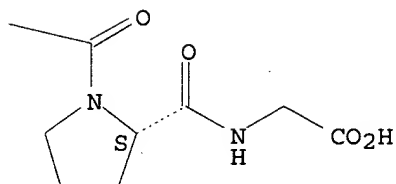
- conjugated unsatd. polymers)**
- IT 26570-48-9DP, **conjugate** addn. product with trimethylolpropane tris(3-mercaptopropionate) or pentaerythritol tetrakis(3-mercaptopropionate) 26570-48-9P 33007-83-9DP, **conjugate** addn. product with PEG diacrylate 39927-08-7P 101661-95-4P 119388-27-1P, Lactide-polyethylene glycol block copolymer 287184-65-0P 287184-66-1P 287184-67-2P 287184-68-3P 287184-69-4P 287184-72-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers)**
- IT 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic acid) 9003-05-8, Polyacrylamide 9003-11-6 9003-39-8, PVP 9010-77-9, Acrylic acid-ethylene copolymer 25067-33-8, Ethylene-N-vinylpyrrolidone copolymer 25067-34-9, Ethylene-vinyl alcohol copolymer 25085-79-4, Ethylene-maleic acid copolymer 25805-17-8, Poly(ethyloxazoline) 26099-09-2, Polymaleic acid 287184-73-0 287184-74-1 287184-75-2 287184-76-3 287184-77-4 287184-78-5 287184-79-6 287184-80-9 287184-81-0 287184-82-1  
 RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 (prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers)**
- IT 31694-55-ODP, **conjugate** addn. product with cysteine(thiol contg.) contg. peptide 287184-73-ODP, **conjugate** addn. product with ethoxylated glycerol triacrylate  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers)**
- IT 287480-20-0 287480-26-6  
 RL: PRP (Properties)  
 (unclaimed protein sequence; prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers)**
- IT 91037-65-9 93674-99-8 93675-01-5 107978-83-6  
 109053-05-6 109053-13-6 110590-64-2 111771-60-9 122192-97-6  
 124575-92-4 131167-89-0 134580-64-6 134652-20-3 134652-24-7  
 134652-25-8 134652-26-9 134652-35-0 210159-04-9 214343-81-4  
 214343-83-6 287393-81-1 287393-82-2 287393-83-3  
 RL: PRP (Properties)  
 (unclaimed sequence; prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers)**
- IT 287184-76-3 287184-77-4 287184-78-5 287184-79-6  
 RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 (prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers)**
- RN 287184-76-3 HCAPLUS  
 CN Glycine, glycyL-L-cysteinylglycyL-L-tyrosylglycyL-L-arginylglycyL-L- $\alpha$ -aspartyl-L-seryl-L-proyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

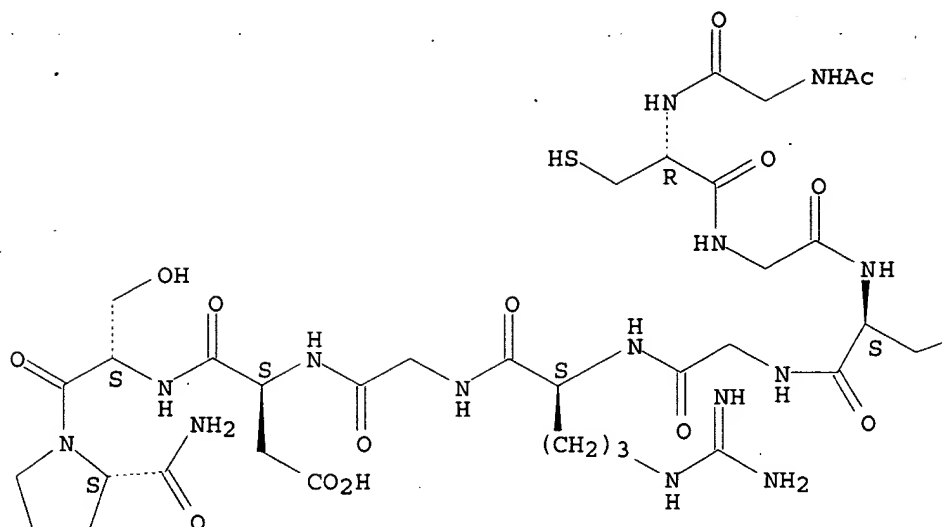


RN 287184-77-4 HCAPLUS

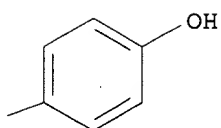
CN L-Prolinamide, N-acetylglycyl-L-cysteinyglycyl-L-tyrosylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

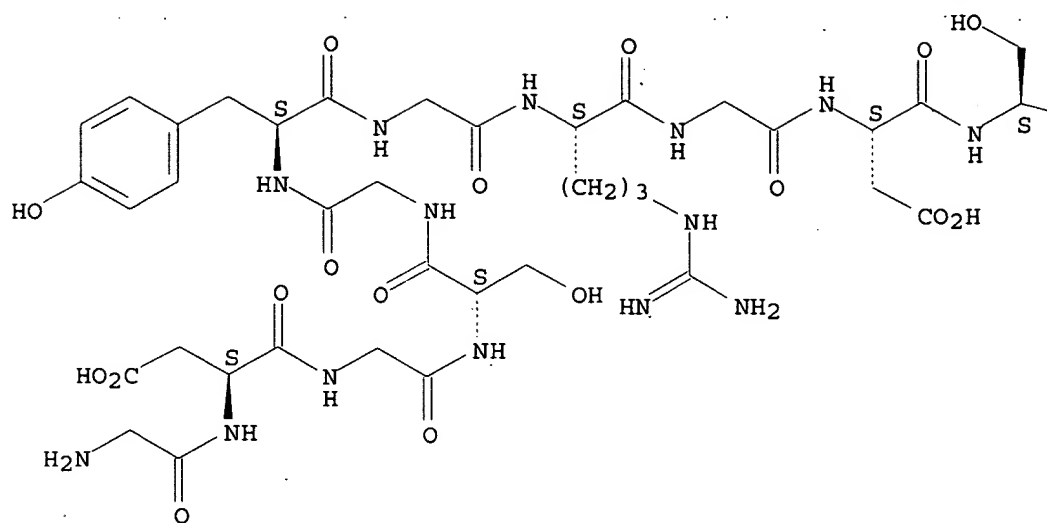


RN 287184-78-5 HCAPLUS

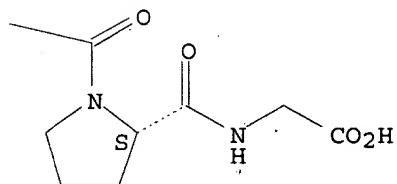
CN Glycine, glycyL-L-.alpha.-aspartylglycyl-L-serylglycyl-L-tyrosylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-seryl-L-prolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



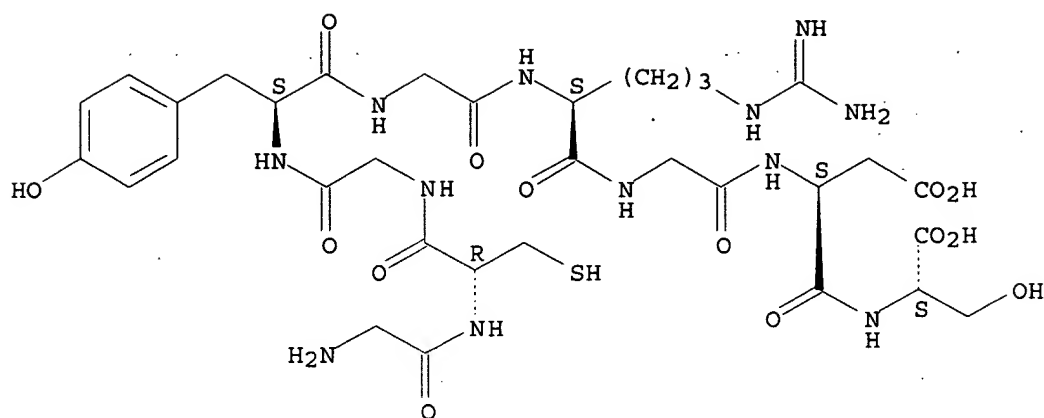
PAGE 1-B



RN 287184-79-6 HCAPLUS

CN L-Serine, glycyl-L-cysteinyglycyl-L-tyrosylglycyl-L-arginylglycyl-L-  
.alpha.-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 91037-65-9 93674-99-8 93675-01-5

214343-81-4

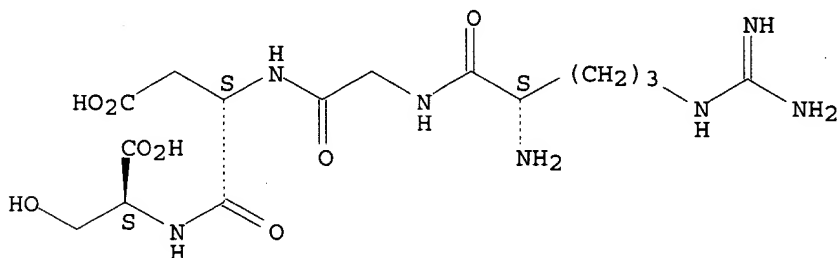
RL: PRP (Properties)

(unclaimed sequence; prepn. of biomaterials formed by nucleophilic addn. reaction to **conjugated unsatd. polymers**)

RN 91037-65-9 HCAPLUS

CN L-Serine, L-arginylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

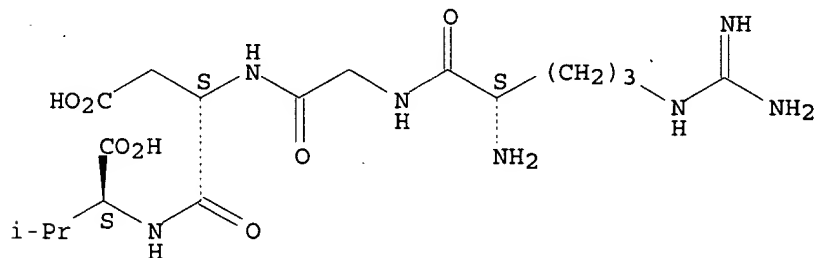
Absolute stereochemistry. Rotation (-).



RN 93674-99-8 HCAPLUS

CN L-Valine, L-arginylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

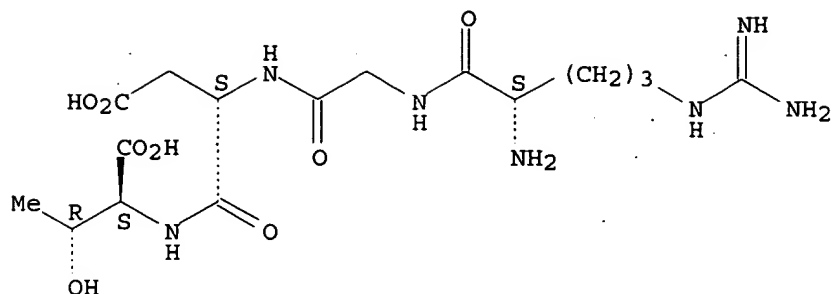
Absolute stereochemistry. Rotation (-).



RN 93675-01-5 HCAPLUS

CN L-Threonine, L-arginylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

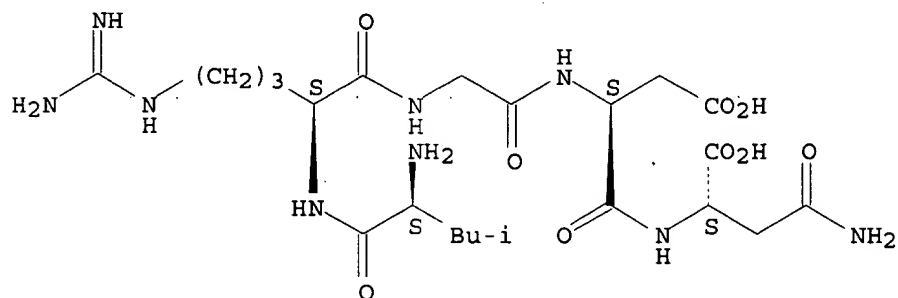
Absolute stereochemistry.



RN 214343-81-4 HCAPLUS

CN L-Asparagine, L-leucyl-L-arginylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:465028. HCAPLUS

DOCUMENT NUMBER: 127:79784

TITLE: Diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies

INVENTOR(S): Heider, Karl-Heinz; Adolf, Guenther; Ostermann, Elinborg; Patzelt, Erik; Sproll, Marlies

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany

SOURCE: Ger. Offen., 13 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19545472	A1	19970612	DE 1995-19545472	19951206
ZA 9610183	A	19970606	ZA 1996-10183	19961204
CA 2239709	AA	19970612	CA 1996-2239709	19961205
WO 9721104	A1	19970612	WO 1996-EP5448	19961205

W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SK, TR, UA, US, UZ, VN

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

AU 9711773	A1	19970627	AU 1997-11773	19961205
AU 726704	B2	20001116		
EP 865609	A1	19980923	EP 1996-942362	19961205
EP 865609	B1	20030319		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI				
CN 1207811	A	19990210	CN 1996-199248	19961205
BR 9611901	A	19990302	BR 1996-11901	19961205
JP 2000502067	T2	20000222	JP 1997-520993	19961205
NZ 324314	A	20000228	NZ 1996-324314	19961205
EE 3783	B1	20020617	EE 1998-164	19961205
RU 2193779	C2	20021127	RU 1998-112600	19961205
PL 184521	B1	20021129	PL 1996-327066	19961205
AT 235056	E	20030415	AT 1996-942362	19961205
NO 9802588	A	19980805	NO 1998-2588	19980605
BG 62985	B1	20001229	BG 1998-102513	19980605

## PRIORITY APPLN. INFO.:

DE 1995-19545472 A 19951206  
 DE 1996-19615074 A 19960417  
 WO 1996-EP5448 W 19961205

- AB A method for diagnosis and therapy of epithelial carcinomas is disclosed that is based on the CD44 antigen fragment expressed by the gene variable exon v6. Immunol. detn. of the variant antigen fragment using antibody probes is included. Esp. useful is the monoclonal antibody BIWA-1 (VFF-18). Immunotherapy using antibodies is also claimed.
- IC ICM C12Q001-68  
 ICS G01N033-574; A61K039-395
- CC 14-1 (Mammalian Pathological Biochemistry)  
 Section cross-reference(s): 1, 15
- IT Fluorescent probes  
 (conjugates, with antibody; diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies)
- IT Antitumor agents  
 Cytokines  
 Enzymes, biological studies  
 Immunomodulators  
 Toxins  
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (conjugates, with antibody; diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies)
- IT Carcinoma  
 Epitopes  
 Immunotherapy  
 PCR (polymerase chain reaction)  
 (diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies)
- IT Drug delivery systems  
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (prodrugs, conjugates, with antibody; diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies)
- IT 161123-11-1  
 RL: ANT (Analyte); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (CD44 antigen exon 6-encoded sequence epitope-contg. fragment; diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies)



IT 161123-11-1

RL: ANT (Analyte); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (CD44 antigen exon 6-encoded sequence epitope-contg. fragment; diagnosis or therapy of epithelial carcinoma based on CD44 gene variant exon v6 and encoded antigen fragment using antibodies)

RN 161123-11-1 HCAPLUS

CN L-Threonine, L-glutamyl-L-tryptophyl-L-phenylalanylglycyl-L-asparaginyl-L-arginyl-L-tryptophyl-L-histidyl-L-.alpha.-glutamylglycyl-L-tyrosyl-L-arginyl-L-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

